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BULLETIN TITLE: Introduction to Revised Chapters 161,
162, 163, 164, and 165: Implementation
of 14 CFR Part 145 Repair Station
Procedures

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1. PURPOSE. This bulletin provides interim guidance to Airworthiness aviation safety inspectors (ASI) who have oversight and surveillance responsibilities for FAA-certificated repair stations (CRS) under Title 14 of the Code of Federal Regulations (14 CFR) part 145. This bulletin and the attached revised chapters 161-165 will guide ASIs in implementing part 145 during the transitional period before the rule's October 3, 2003 effective date, and thereafter.

A. Advisory Circular (AC) 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals, and the attached chapters and will guide ASIs in reviewing repair station manuals (RSM) and quality control manuals (QCM) of CRS as they transition to these from the Inspection Procedures Manual.

B. AC 145-9 and the attached chapters will guide ASIs in the certification of new applicant repair stations located within and outside the United States and its territories.

C. This bulletin also notifies ASIs of the elimination of Manufacturer Maintenance Facilities (MMF) and the limited "other" rating.

2. BACKGROUND. Few substantive changes have been made to part 145 since it was recodified in 1962. The only significant adoption of an amendment since that time occurred in 1988 when the scope of work for foreign repair stations was expanded. A more diversified industry has surfaced due to the modernization of the aviation fleet and the technological growth of the aviation industry. The revisions and reorganization of the rule provides more regulatory flexibility, and in some cases, lessens regulatory requirements without compromising safety. Most importantly, the final rule requires a repair station to present its operational procedures in its RSM and define its quality control methods in its QCM.

3. ELIMINATION OF CERTIFICATES OR RECERTIFICATION.

A. MMFs eliminated by the implementation of the revised rule on October 3, 2003 must be recertificated as stand-alone part 145 repair stations or as a satellite repair station under the managerial control of another CRS.

B. Repair stations with a limited "other" rating will be required to recertificate to a more appropriate rating. If certificated into another limited-rated repair station, the repair station may elect to use a capabilities list to identify articles upon which it performs maintenance. The articles listed must be within the scope of the ratings of the repair station's certificate. If a more appropriate rating cannot be found, the FAA may have to withdraw the certificate. The General Aviation and Repair Station Branch, AFS-340, is aware of repair station certificates issued to facilities that were not performing maintenance, preventative maintenance, or alterations on aircraft or aircraft articles to which part 43 is applied.

C. Repair stations certificated to perform line maintenance for air carriers may also require recertification to a more appropriate rating. The part 145 rule effective on October 3, 2003 provides for a *line maintenance authorization* for CRS, but is not a stand-alone rating and cannot be the only maintenance conducted by the repair station. Most of these facilities do not meet the housing, equipment, or personnel requirements of the current rule, and will not meet those requirements of the rule going into effect on October 3.

4. DISCUSSION.

A. The FAA has revised five Order 8300.10 handbook chapters. These revised chapters will be used by ASIs for the transition and adoption of the revised rule:

(1) Chapter 161, Introduction to Part 145 Repair Stations.

(2) Chapter 162, Procedures for Certificating Part 145 Repair Stations/Satellites Located Within the United States and Its Territories.

(3) Chapter 163, International Field Office Procedures for Certificating/Renewing/Amending a Part 145 Repair Station Located Outside the United States and Its Territories.

(4) Chapter 164, Evaluate a Part 145 Repair Station and Quality Control Manual or Revision.

(5) Chapter 165, Evaluate Part 145 Repair Station Facilities and Equipment.

B. The FAA also developed AC 145-9, effective on 7/3/03, to help CRS or applicants to develop, and ASIs to evaluate, RSM and QCM. This AC replaces AC 145-3, change 1, dated 2/13/81.

5. ACTION. ASIs are requested to review and use the attached chapters to ensure a smooth transition while ensuring their assigned repair stations remain compliant as the revised part 145 rule becomes effective.

A. During the transitional period it is essential that FAA ASIs, part 145 CRS personnel, and applicants work harmoniously to ensure that manuals and newly-developed procedures are in place on the October 3, 2003 effective rule date. The following tasks must be completed by then:

(1) A CRS must provide a list of contracted maintenance functions to the FAA for approval before October 3, 2003. This is the *only* approval needed.

(2) CRS must submit manuals and revisions to FAA by October 3, 2003.

(a) Manual procedures previously accepted by FAA do not need to be reaccepted. ASIs should review the manuals as soon as possible to ensure that any new procedures added as a result of new requirements comply with the final rule. ASIs must be aware of procedures that require inspectors to review manual revisions prior to their implementation. If that is the CRS's procedure, ASIs should review these revisions and provide a statement that no regulatory conflicts were noted before the CRS can implement the change.

(b) New applicant manuals will require FAA review for rule compliance.

(c) CRS and applicants will submit manuals and/or revisions to the FAA via a transmittal document, either electronic or paper. Electronic transmittal is dependent on program compatibility between the FSDO and repair station (electronic signature may be used if so equipped). FSDOs may elect letter, e-mail, or fax media to receive and issue information on CRS submissions.

B. ASIs will use the attached chapters' information during the certification of new applicants if the certification completion date will be after October 3, 2003. New applicants will be required to comply with the final rule and certification requirements as outlined in the attached handbook chapters. ASIs are advised to apply sound judgment during the transition period while certificating new applicants, to prevent a duplication of the certification process.

C. ASIs will use the attached chapters when performing reviews or tasks associated with the final rule. Both the current repair station chapters in Order 8300.10 and these attachments may have to be used until the final rule is implemented on October 3.

6. INQUIRIES. The Flight Standards General Aviation and Repair Station Branch, AFS-340, developed this bulletin. Any questions concerning this bulletin should be directed to Herb Daniel, AFS-340, at 202-267-3109.

7. LOCATION. This bulletin and the attached chapters will be incorporated into a future change to Order 8300.10. Inspectors should make reference to this bulletin in the appropriate margins of their handbooks.

/s/ Carol E. Giles for
David E. Cann, Manager
Aircraft Maintenance Division

Attachments

CHAPTER 161. INTRODUCTION TO PART 145 REPAIR STATIONS

SECTION 1. BACKGROUND

1. PURPOSE. This chapter defines relevant terms for Title 14 of the Code of Federal Regulations (14 CFR) part 145, Repair Stations. It also explains the policies and procedures applicable to repair stations, regardless of their geographic location.

3. GENERAL.

A. Definitions.

(1) *Air Agency Certificate.* Federal Aviation Administration (FAA) Form 8000-4, Air Agency Certificate, is the authority granted by the FAA for a repair station to conduct business. The certificate states the following information:

- (a) Repair station number.
- (b) What the repair station's ratings are to include:
 - Class ratings
 - Limited ratings
 - Limited specialized service ratings
- (c) The location and name of the repair station.
- (d) The expiration date, as applicable.

(2) *Accountable Manager.* The person designated by the certificated repair station as responsible for and with authority over all repair station operations that are conducted under part 145. This person's duties include ensuring that repair station personnel follow the regulations and serving as the primary contact with the FAA.

NOTE: The FAA Accountable Manager definition may differ from the Joint Aviation Authorities (JAA) Accountable Manager; however, one person may serve both positions. The operations specifications (OpSpecs) and Vital Information System (VIS) have been revised to include both.

(3) *Article.* An aircraft, airframe, aircraft engine, propeller, appliance, or component part.

(4) *Class Ratings.* Ratings issued if the repair station can prove the capability to maintain a representative number of products under this rating. A class rating should not be issued and then restricted to a specific product. For such a case, a limited rating should be issued.

(5) *Contracting.* Entering into an agreement between two or more persons for the performance of maintenance functions on an article.

(6) *Correction.* An action taken to eliminate a detected nonconformity as it relates to the articles or maintenance processes.

(7) *Corrective Action.* An action taken to eliminate the cause of a detected nonconformity or other undesirable condition to prevent its recurrence.

(8) *Directly in Charge.* Responsible for the work of a certificated repair station that performs maintenance, preventive maintenance, alterations, or other functions affecting aircraft airworthiness. A person directly in charge doesn't need to physically observe and direct each worker constantly, but must be available for consultation on matters requiring instruction or decision from a higher authority.

(9) *Domestic Repair Station.* A term used in the automated OpSpecs to describe an FAA-certificated facility located within the United States that performs maintenance, preventive maintenance, or alterations on articles.

(10) *Foreign Repair Station.* A term used in the automated OpSpecs to describe an FAA-certificated facility located outside of the United States that performs maintenance, preventive maintenance, or alterations on articles.

NOTE: The rule has removed the "foreign" and "domestic" terms; however, these terms are still valid when revising OpSpecs due to the current repair station certificate numbering system.

(11) *Geographic Authorization.* An authorization that is issued to a certificated repair station located outside the United States to maintain U.S.-registered aircraft at a location where an appropriately rated repair station is not available. This provision is limited to repair stations located solely outside the United States that hold an airframe rating for an aircraft of the same make and model for which the repair station is rated.

(12) *Limited Ratings.* Ratings issued to repair stations for the performance of maintenance on particular makes and models of airframes, powerplants, propellers, radios, instruments, accessories, and/or parts.

(13) *Limited Specialized Service Ratings.* Ratings issued for a special maintenance function when the function is performed in accordance with a specification or data acceptable to the FAA. The OpSpecs must include the specifications or data used by the repair station to perform that service in accordance with part 145, § 145.61(c).

(14) *Line Station Maintenance.* Unscheduled maintenance resulting from unforeseen events, or scheduled checks that contain servicing and/or inspections that do not require specialized training, equipment, or facilities.

(15) *Maintenance Function.* A step or series of steps in the process of performing maintenance, preventive maintenance, or alterations, which may result in approving an article for return to service. Only persons authorized under part 145, §§ 145.157(a) and 145.213(d) may approve an article for return to service, perform a final inspection, or sign a maintenance release.

NOTE: When repair station personnel are used as repairmen and their job duties include return to service, final inspection, or maintenance release of an aviation article, their repairman certificates must indicate those duties to satisfy the requirements of §§ 145.157(a) and 145.213(d). For example, the certificate might show: Certificate privileges of 14 CFR part 65, § 65.103 valid for “return to service,” “final inspection,” or “maintenance release,” while employed by repair station name, City, State and certificate number.

(16) *Operations Specifications.* OpSpecs are issued by the FAA to indicate the authorizations and

limitations to ratings as specified on the air agency certificate.

(17) *Quality Control Manual.* A manual that describes the inspection and quality control procedures used by the repair station.

(18) *Repair Station Manual.* A manual that describes the procedures and policies of a repair station’s operations.

(19) *Satellite Repair Station.* An additional certificated facility or location under the managerial control of another certificated repair station.

B. Capabilities List. A certificated repair station with a limited rating may perform maintenance, preventive maintenance, or alterations on an article if it is listed on a current capability list acceptable to the FAA or on the repair station’s OpSpecs.

(1) If the repair station chooses to use a capability list, the repair station manual must:

- Contain procedures for revising the list and notifying the certificate-holding district office (CHDO)
- Include how often the CHDO will be notified of revisions
- Contain procedures for the self-evaluation required under part 145, § 145.215(c) for revising the capability list
- Describe the methods and frequency of such evaluations
- Contain procedures for reporting the results to the appropriate manager for review and action

(2) The capability list itself may be included as part of the repair station manual or as a separate document; however, the procedures for revising the list and for performing the self-evaluation must be in the manual.

(3) The repair station must perform a self-evaluation before adding an article to its capabilities list. The individual(s) performing the self-evaluation should be qualified to perform an audit to determine compliance with part 145. The self-evaluation procedures in the repair station manual should ensure that the repair station has the appropriate limited rating; adequate housing and facilities; the recommended tools, equipment, and materials; current technical data; and sufficient qualified personnel.

(4) The results of the self-evaluation must be reported to the appropriate repair station manager for review. If the self-evaluation was satisfactory, the capability list may be revised. The revised list and any other necessary technical data can be submitted with a cover letter to the principal inspector at the CHDO.

(5) If the capability list is listed on the OpSpecs, it should be identified by title, date, or revision number. Capability list currency can be shown by a list of effective pages or equivalent documents, which is signed by the authorized representative of the repair station and the FAA principal inspector.

(6) If the repair station does not maintain the necessary tools, equipment, housing, facilities, and trained personnel to perform the required maintenance on the article(s) listed on the capabilities list, the article(s) should be deleted from the list.

NOTE: The repair station must maintain, or provide evidence that they can obtain, the tools and equipment required to maintain the articles on the capability list.

C. Additional Fixed Locations. A repair station may have additional fixed locations (facilities) without certificating each facility as a stand-alone or satellite repair station. This authorization may be granted if all of the facilities are localized and within a defined area, such as several buildings or hangars, which may be on or near the same airport or at or near the address stated on the repair station certificate.

(1) Additional locations are not separate facilities and must collectively be considered one repair station. A geographic authorization or other repair station certificate is not required. However, the repair station must have procedures in its manual to describe how it will operate in this manner and remain in compliance with its manual and with the requirements of part 145. This situation is not considered work away from the station.

NOTE: The aviation safety inspector (ASI) and repair station accountable manager must collaborate when making a determination that additional locations are required for repair station operations. A primary concern to the FAA is that all the facilities be localized and within a defined area of operation. ASIs must be assured reasonable access to all locations and not be inconvenienced by extended travel distances. It is expected that extended travel

between facilities may have an adverse impact on FAA oversight and surveillance capabilities.

(2) Multiple locations may be particularly useful when other federal laws or local ordinances require a repair station to use remote sites when performing some maintenance actions, such as functional testing of turbine engines. Local laws and noise abatement programs may force a repair station to another work site. The FAA may find that the additional locations do not have a significant impact on the maintenance performed, provided the manual has sufficient procedures to ensure the airworthiness of articles being maintained.

(3) All additional locations must be under the full control of the primary facility. It is not necessary that each location be completely equipped since tools, equipment, parts, etc. can be transported between facilities.

(4) The repair station must apply for the use of additional locations and have that request approved prior to exercising the privileges of its certificate and ratings at these facilities. The application must list each facility and the physical address of the facilities. The repair station must submit a revision to its manuals detailing the procedures it will follow when transporting equipment or parts, how it will ensure adequate and appropriate personnel are available at each site when needed, and how it will continue to meet the requirements of part 145.

D. Contract Maintenance. A repair station must have the material and equipment necessary to perform the functions appropriate to its rating. However, it need not have the tools and equipment for functions it is authorized to contract out pursuant to its FAA-approved list of maintenance functions. The repair station must request approval before it can contract a maintenance function. If the FAA approves the contracted maintenance function, the repair station can determine who will perform the maintenance.

NOTE: A repair station may contract maintenance functions to both FAA-certificated and non-FAA certificated facilities only if the FAA has approved the maintenance function.

(1) If a repair station contracts a maintenance function to another FAA-certificated repair station, the repair station performing the maintenance function is responsible for providing the approval for return to

service of maintenance performed on each article. The originating repair station must determine that the contracted repair station is properly rated to perform the maintenance. The contracted repair station performing the maintenance must approve the article for return to service for the work they perform. Articles received from a certificated facility must be properly processed through the repair station's receiving inspection procedures before further maintenance is performed.

(2) If the repair station contracts to non-FAA certificated facilities, the repair station must include provisions that allow the FAA to inspect and observe the work performed on those articles at the non-certificated facilities. The individual in charge of the contract maintenance program may be required to accompany the FAA during these inspections. These inspections may determine if the repair station is able to continue to contract the maintenance functions to this source and ensures that:

- The non-FAA certificated facility follows a quality control program equivalent to the FAA-certificated repair station's system with respect to the work being performed for the certificated repair station.
- The work performed on the article is verified by testing and/or inspection.
- The article is airworthy with respect to the work performed by the non-certificated source.
- The repair station manual should include a procedure ensuring that contracts contain a provision for FAA inspections.

(3) The repair station is responsible for approving for return to service any article on which work has been performed and for ensuring the article's airworthiness. Inspection procedures within the manual must enable the repair station to determine the airworthiness of the work performed on each article received. If the repair station cannot determine the quality of the contracted work by inspection or test, the work can be contracted only to an FAA-certificated facility that is able to inspect the work performed for compliance with part 43.

NOTE: As stated in the final rule preamble, it is not enough for the contracting repair station to give its quality control manual to the non-certificated contractor and assume the proper

procedures will be followed. The certificated repair station must provide adequate surveillance to ensure its quality control procedures are followed.

(4) *Contracting to Canadian Approved Maintenance Organizations.* Part 43, § 43.17(c) authorizes an approved maintenance organization (AMO) whose system of quality control has been approved by Transport Canada to perform maintenance on U.S. aeronautical products. Section 43.17(d) requires that this maintenance be performed in accordance with part 43, §§ 43.13, 43.15, and 43.16.

(a) These are the same regulations that must be followed by a U.S.-certificated repair station. Section 43.17(e)(1) requires the AMO to approve the article for return to service after performing maintenance. Section 43.17(d) states that the work must be performed and recorded in accordance with part 43. The Canadian form, TCCA Form 24-0078, is similar to our FAA Form 8130-3, Airworthiness Approval Tag, and meets the recording requirements when filled out properly.

(b) Since their quality control system is approved by Transport Canada, the organization is viewed as similar to the U.S.-certificated repair station system. We do not have any U.S. foreign repair stations in Canada because we have a bilateral maintenance agreement with Canada.

(c) Although not FAA-certificated repair stations, Canadian AMOs performing work per § 43.17 comply with the same requirements that U.S. repair stations must when performing maintenance, preventive maintenance, or alterations. Because of the similarities, an on-site inspection would not be required.

(5) *Contracting to a Certificated Mechanic.* Part 43 authorizes a certificated mechanic to provide approval for return to service after performing maintenance, preventive maintenance, or alterations. This person is also held to the same performance requirements as the repair station. The mechanic approves the article for return to service by providing documentation that complies with part 43, § 43.9. The repair station would not be required to conduct an on-site inspection of the mechanic's facilities.

NOTE: This situation may be used by repair stations to contract maintenance functions that are outside the scope of their ratings. For

example, an avionics facility without a limited airframe rating installing a Supplemental Type Certificate (STC) may contract the airframe portion to a certificated person.

E. Work Performed at Another Location. A repair station may perform work away from its fixed location for a one-time special circumstance or on a recurring basis.

(1) A repair station may perform work away from its fixed location for a one-time special circumstance, such as an aircraft on the ground or in preparation for a ferry flight.

- The rule further states that the FAA determines these special circumstances.
- The repair station manual does not need to include a specific procedure, since the FAA must approve the request to work at another location prior to the repair station engaging in this type of maintenance.
- The CHDO will review the request and inform the repair station of any parameters that must be followed to perform the work.

(2) A repair station may perform work away from its fixed location on a recurring basis when necessary, such as to perform mobile field services. This will allow work away from the repair station's fixed location as a part of everyday business rather than under special circumstances only.

- If the repair station intends to perform maintenance at places other than its fixed location, the manual must include procedures for accomplishing the maintenance, preventive maintenance, alterations, or specialized services.
- The procedures must address issues related to transportation, tools, equipment, personnel, technical data, and records.
- These procedures should ensure the repair station at the remote location remains in compliance with part 145 and its manual, just as if the work was performed at the repair station's fixed location.

F. Taking Corrective Actions on Deficiencies.

Part 145, § 145.211(c)(1)(ix) states that the quality control manual must include procedures used for taking corrective action on deficiencies. A corrective action is taken to remedy an undesirable situation. The correction of deficiencies is normally an integral part of a repair station's improvement process, and could include revisions to procedures that were not working properly. (Refer to AC 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals, for additional guidance.)

NOTE: The repair station is not required at this time to have an internal evaluation program, quality assurance program, or a continuous improvement program.

(1) Corrective action requires that a fact-based investigation determine the root cause or causes in order to eliminate them. Corrective action would be applicable in two situations: before the article is approved for return to service and after the article has been approved for return to service.

(2) If a deficiency is found before the article is approved for return to service, the repair station should follow their procedures describing how rework will be accomplished. If the deficiency is noted after the article is approved for return to service, the repair station should follow their procedures to notify the CHDO and the owner/operator of any potential problems and recall any unairworthy product. The objective of the investigation into the cause of the deficiency and the corrective actions taken is to prevent a recurrence of the same or similar problems.

(3) The procedures in the quality control manual should include a system for documenting any deficiencies and the corrective actions taken to prevent a recurrence. The system should provide the ability to track any open corrective action requests and the date the corrective action is due. The program should also include audits of the corrective action(s) taken to ensure it was effective. These audits should also be tracked to ensure they are completed in a timely fashion.

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SECTION 2. PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites:

- Knowledge of the regulatory requirements of 14 CFR part 145
- Successful completion of Airworthiness Inspector's Indoctrination Course for General Aviation and Air Carrier Inspections
- Successful completion of the Airworthiness Inspection/Surveillance of Foreign/Domestic Repair Stations Course and the on-the-job training (OJT) program related to part 145

B. Coordination. These tasks require coordination among the ASIs (maintenance and avionics). Regional coordination may be required.

C. Electronic Media. Air Agencies that elect to use electronic media (CD-ROM, LAN-based or internet-based systems) must be allowed to use those systems without interference or extra procedures. It is incumbent upon the air agency to ensure its CHDO is equipped for the media it selects to ensure delays or other hindrances do not occur. To ensure a consistent approach to document and manual submissions and revisions, the requirement for signing the title page or revision page will be replaced by cover letters.

(1) This procedure must be followed for the remaining submissions discussed in this chapter.

(2) Repair stations and applicants will submit documents for FAA acceptance or approval accompanied by a cover letter with the information captured in the note below.

(3) ASIs will accept, approve, or reject submissions using a cover letter with the information captured in the note below.

NOTE: Federal agencies can no longer refuse electronic versions of manuals, forms, record systems, etc. Federal law prohibits agencies from making the use of electronic media more difficult or from requiring additional steps or procedures for users of electronic media. Therefore, all repair station document submissions must be accompanied by a cover letter that describes the submission and is signed by the appropriate manager. ASIs will

accept or approve submissions with a cover letter indicating the date; document, manual, or revision number; and an acceptance or approval statement. Additionally, ASIs will reject a certificate holder's submission using a cover letter that indicates the date; document, manual, or revision number; and a detailed explanation of the discrepancies or non-conformances noted. The acceptance or approval letter should remain with the manual or be kept on file.

D. Use of Electronic Transmissions (E-mail or Facsimile). E-mail or fax responses are an acceptable alternative to the cover letter if the repair station is equipped to transmit and receive any necessary attachments. This may include the use of electronic signatures. This method should be addressed in the repair station's procedures and found acceptable to the FAA.

3. CAPABILITIES LIST.

A. Accept an air agency capability list.

(1) Review the capability list to ensure the repair station is rated for the articles identified on the list.

(2) Review the repair station manual procedure for:

- The revision process, including CHDO notification
- Where and how the list will be maintained
- Frequency and method of revising the list
- Reporting self-evaluation results to the appropriate manager

(3) Review the self-evaluation process for:

- Individual qualifications of persons performing the self-evaluations
- Performance of the self-evaluation prior to modifying the capability list
- Adequately identifying the tools, equipment, materials, technical data, adequate housing and facilities, and qualified personnel that are available prior to modifying the capability list

B. If the submission or revision is found acceptable, ASIs will:

(1) If a paper revision, remove the affected pages and insert the revised pages in the capability list or replace the list in its entirety, if that is the method used by the repair station, and file the cover letters in the appropriate office file.

(2) If in electronic format, replace the outdated disk or file with the current capability list or revised pages and place a copy of the acceptance letter in the certificate holder's office file.

C. Reject the capability list or revision by doing the following:

(1) Initiate a cover letter indicating the date, document, and revision number of the capability list or revision being rejected.

(2) Return all copies to the applicant with an explanation of discrepancies that must be corrected and instructions for resubmitting the documents.

5. ADDITIONAL FIXED LOCATIONS.

A. A repair station may request additional fixed locations be added to its OpSpecs by submitting the request on FAA Form 8310-3, Application for Repair Station Certificate and/or Rating. The repair station:

(1) Lists the physical address of all additional fixed locations to be added to its OpSpecs.

(2) Identifies the maintenance, preventive maintenance, or alterations to be performed at each additional location.

(3) Submits repair station and quality control manual revisions, to include how it will continue to meet the requirements of part 145 and its manual at each additional location.

(4) Supplies any additional information needed by the FAA to consider the request.

B. The principal inspector receives the application, manual revisions, and any other information necessary to determine the appropriateness of the request. The inspector must:

(1) Review and accept the manual revisions that detail how the repair station will perform maintenance at the additional location.

(2) Review any other material or information submitted to assist the inspector in completing their review.

(3) Inspect the additional location to ensure it meets the following criteria:

- It is within the local commuting area and does not pose an inconvenience to the inspector for traveling to all locations.
- It is appropriate for the work to be accomplished under the repair station's certificate and ratings as listed on the OpSpecs.
- It is under the full control of the repair station.

C. The principal inspector approves the additional fixed location by adding this address to the repair station's OpSpecs.

7. CONTRACT MAINTENANCE.

NOTE: With the removal of Appendix A from part 145, the prohibition of limited-rated repair stations to contract out work has also been removed. The FAA does not intend to allow "virtual repair stations" that provide only the approval for return to service. This means that ASIs must be attentive to the maintenance functions they are approving for each facility. Although a list such as Appendix A was a convenient way to maintain certain levels of maintenance for each repair station, it was impossible to maintain it in a current status without this rule being in constant revision.

A. *Maintenance Functions.* When accepting a repair station's contract maintenance list, the repair station must submit, and have approved, the maintenance functions it intends to contract out to other sources. Repair stations can submit their maintenance functions in any manner acceptable to the FAA, but cannot contract a maintenance function that has not been previously approved. Repair station manuals must contain a procedure that describes how the repair station will submit its maintenance functions to the CHDO. The repair station manual must also describe how the repair station will revise the list of maintenance functions.

(1) Maintenance functions may fall into three categories:

(a) Functions that must be contracted out because the repair station doesn't have the housing, facilities, materials, or equipment available on its premises and under its control.

(b) Functions for which the repair station does have the housing, facilities, materials, and equipment "in-house," but may need to contract to another facility because of workload or emergency situations.

(c) Functions that must be contracted out by the repair station because they are outside the scope of its ratings but is necessary to complete a maintenance action. For example, an avionics facility without a limited airframe rating installing a STC may contract the airframe portion of the STC.

(2) Repair stations will submit the list of maintenance functions for approval to the CHDO with a cover letter that describes the document being submitted and shows the date and/or revision number of the document.

(a) The repair station should differentiate, in some way, between the maintenance functions it must contract out and the maintenance functions it may need to contract out due to heavy workload periods or those maintenance functions that require a certificated mechanic to perform.

(b) The repair station may also wish to provide a method for which a maintenance function can be added to its FAA-approved list on an emergency basis. ASIs should ensure that the procedure accepted in the repair station manual regarding these emergency procedures sufficiently addresses the following issues:

- How the maintenance function would be added
- How the FAA approval would be obtained in a short period of time

(3) ASIs will approve or reject the maintenance function list by:

- Initiating a cover letter identifying the document, date, and/or revision number
- Including a statement of approval and adding the maintenance function to the repair station's OpSpecs if no discrepancies or concerns are identified concerning the maintenance functions contained in the document

- Initiating a statement of rejection if the ASI finds discrepancies with some or all of the maintenance functions in the document

(4) ASIs should provide a reason for rejecting the maintenance functions to assist repair stations in determining which functions would be allowed. Some reasons for rejecting maintenance functions include:

- Too much "core business" contracted out, leaving the repair station to provide little, if any, actual maintenance on the articles it is rated to work on
- Continually using contracting out as a means to keep staffing below adequate levels for the work the repair station is obligated to accomplish
- Not qualifying/auditing non-certificated contract maintenance providers
- Contracting out a maintenance function without prior approval

NOTE: Contracting out maintenance functions should not be used to replace the need for adequately staffed and trained maintenance personnel. ASIs should be cautious of repair stations that constantly revise the maintenance function list on an emergency basis in order to complete work in a timely manner. ASIs should ensure that repair stations have the necessary trained personnel for the scope and complexity of the ratings they hold.

B. Contract Maintenance. Repair stations that do not intend to contract out maintenance functions must have the housing, facilities, material, and equipment necessary to perform the functions appropriate to their ratings. The tools, equipment, and technical data must be available at the time the work is performed. Repair stations wishing to contract maintenance functions out must submit a list of those maintenance functions for approval to the FAA.

(1) The repair station must make available a list that includes the maintenance functions, the name of the contractor that will perform the function(s), and their physical address.

(2) The ASI must determine:

- That the repair station manual has adequate procedures that dictate how the maintenance functions will be submitted and revised

- How the repair station will qualify and/or inspect non-certificated contractors
- How the approval for return to service will be applied once an article returns from a contractor's facility

(3) A certificated repair station may not provide only approval for return to service of a type-certificated article following maintenance, preventive maintenance, or alterations.

NOTE: A certificated repair station may not contract out to a non-certificated person unless it provides in its contract that the FAA may conduct inspections or observe maintenance functions that are being performed for the repair station. If a non-certificated person refuses to allow the FAA access, the certificated repair station cannot approve the articles for return to service.

SECTION 3. REPAIR STATION RATINGS

1. AIRFRAME RATINGS AND CLASSIFICATIONS UNDER PART 145, § 145.59.

A. Airframe Maintenance or Alteration.

(1) Repair stations performing maintenance or alterations on articles such as seats, seat belts, berths, galleys, lavatories, cabinetry, aircraft composite components, cabin/cockpit interior foam and fabric upholstered parts, electrical wiring harnesses, dividers, curtains, windows, and any other interior structure require an appropriate airframe rating. (See Table 161-1 below.) Additionally, repair stations performing maintenance or alterations on external aircraft structures or fuselage articles such as aircraft painting, landing gear removal and installation, doors and the attaching components, fuselage repairs or alterations, or flight controls and attaching hardware require an appropriate airframe rating.

(2) Similarly, articles of all-cargo configured aircraft such as unit loading devices, cargo pallets or containers, bulkheads, ball mats, floor roller tracks, floor or side locks are considered part of the airframe and require an appropriate airframe rating. An appropriate airframe rating is also required to perform maintenance or alterations on articles associated with an emergency medical support installation such as stretchers, litters, and supporting hardware or structures.

B. Limited Ratings.

(1) Limited ratings listed in part 145, § 145.61 have long been interpreted as being limited to all the functions on a particular make and model of aircraft, powerplant, or propeller. Although this interpretation was appropriate when the current rating system was developed in the 1950s, the repair and maintenance industry has developed numerous “niche” businesses that are limited to not only a particular article make or model, but also to certain maintenance functions on a particular make or model.

(2) The current OpSpecs allow the limitation of make and models, as well as maintenance functions, to be properly identified in the “Limitations” section. Limitations are not to be vague and undefined. If painting, for instance, is the only maintenance function a repair station intends to do, the limitation should read, “*Limited to painting airframe structure and components*

on Boeing 737 series aircraft” or similar language. If the repair station is limited to doing only a certain part of the airframe, that language should specify the manufacturer, make and model of the component, and what *exactly* the repair station is limited to do.

NOTE: ASIs must ensure that the limitations of repair stations adequately address the capabilities of the repair station both by the make and model of the aircraft, powerplant, propeller, or component part of those articles, and by the maintenance capabilities for which it has the tools, equipment, housing, data, and trained personnel to maintain. At no time should a repair station be issued a rating if it does not have the required supporting requirements (tools, equipment, etc.) to perform the maintenance required of the rating.

C. Limited “Other” Category. With the implementation of the final part 145 rule, the limited “other” category rating has been eliminated. This action was necessary because there were no limitations directing ASIs to ensure that this rating was being directed to articles to which part 43 applied. ASIs need to be aware that all repair station ratings must apply to an aircraft, powerplant, propeller, or component part thereof. If an applicant’s request does not meet this criteria, a repair station certificate and rating is not appropriate.

NOTE: Repair stations and applicants are receiving requests from air carriers, Department of Defense maintenance contractors, or other repair stations to obtain part 145 certification. Although these requests may seem reasonable, part 145 certification is not required, and does not apply, to public aircraft operated by federal, state, or local governments. Also, air carriers are requesting part 145 certification for the performance of certain functions on articles where part 43 doesn’t apply using engineering orders or other documents as “approved data.” Though these items may be used in or carried on the operator’s aircraft during revenue flights, this does not mean these items meet the part 43 applicability requirements. These items may include galley utensils/items, portable medical oxygen bottles, etc.

TABLE 161-1. AIRFRAME RATINGS AND CLASSIFICATIONS UNDER § 145.59

Rating	Class	Definitions and Notes
Airframe	<i>Class 1:</i> Composite construction of small aircraft	May perform maintenance and alterations of airframes and airframe components in accordance with part 43 on any article for which it is rated and within the limitations in its OpSpecs. This rating also allows the removal and installation of powerplants, propellers, radios, instruments, and passenger convenience items, but not the performance of maintenance to internal sections of these components.
	<i>Class 2:</i> Composite construction of large aircraft	
	<i>Class 3:</i> All-metal construction of small aircraft	
	<i>Class 4:</i> All-metal construction of large aircraft	
		Airframe: Fuselage, booms, nacelles, cowlings, fairings, airfoil surfaces (including rotors but excluding propellers and rotating airfoils of engines) and landing gear of an aircraft and their accessories and controls.
		Large Aircraft: Gross takeoff weight of more than 12,500 lbs. Typically considered transport-category aircraft.
		Small Aircraft: Gross takeoff weight of 12,500 pounds or less. Typically considered general aviation aircraft.

3. POWERPLANT RATINGS AND CLASSIFICATIONS UNDER § 145.59.

A. Components and articles included in the powerplant rating are turbo-superchargers, magnetos, carburetors, appurtenances, and other articles necessary for the proper operation of the powerplant. Although “powerplant” is not defined in the regulations, “aircraft engine” is. This rating does not include removal and installation of the powerplant onto the aircraft. If a repair station wishes to maintain and also install the powerplant, it must obtain an appropriate limited airframe rating. (See Table 161-2 below.)

NOTE: The guidance on limited ratings provided in the airframe section (paragraph 1 above) also applies to limited powerplant ratings.

B. Limited powerplant ratings for certain maintenance functions must identify the powerplant manufacturer and make and model of the powerplant the repair station intends to maintain.

(1) This type of rating allows complete repair or alteration of powerplants limited to a particular make and model. However, powerplant maintenance

has also found numerous “niche” businesses that may include the performance of a specific maintenance function on a wide variety of powerplants.

(2) The OpSpecs must identify all makes and models, as well as any limitations to its maintenance capabilities, such as, “*Limited to plasma spray operations on Pratt and Whitney series turbine blades.*” This rating allows the repair station to plasma spray all Pratt and Whitney turbine blades, regardless of the make or model powerplant the blades came from. Additional manufacturers would need to be listed if they also had the technical data, tools, and equipment to perform this maintenance function on General Electric or Rolls Royce powerplants.

NOTE: Because maintenance procedures, tools, equipment, and technical data may differ between manufacturers, ASIs must ensure that repair stations obtain the appropriate supporting requirements for the capabilities that they are requesting. The use of tools, equipment, or data from another manufacturer conflicts with part 43 requirements and the FAA does not endorse these practices.

Currently, confusion exists when determining the appropriate rating for auxiliary power units (APU). APUs are considered accessories by virtue of their function of providing power to the aircraft while it is not in flight. However, APUs are also used as powerplants for some of the newer models of aircraft which further blurs the lines between what has been considered general aviation and corporate or commuter

aircraft. Until a new rating system is developed, ASIs should consider those articles used as the primary means of propulsion for these newer aircraft as powerplants and not APUs and repair stations should be rated appropriately. However, repair stations performing maintenance or alterations on APUs used strictly to produce auxiliary power for transport-category aircraft should obtain an accessory rating.

TABLE 161-2. POWERPLANT RATINGS AND CLASSIFICATIONS UNDER § 145.59

Rating	Class	Definitions and Notes
Powerplant	<i>Class 1:</i> Reciprocating engine of 400 horsepower or less	May perform maintenance and alterations of powerplants but not to adjoining airframe or propeller components. Repair stations may remove access panels, doors, and nacelles as needed to gain access to the powerplant.
	<i>Class 2:</i> Reciprocating engines of more than 400 horsepower	
	<i>Class 3:</i> Turbine engines	This rating does not include the installation of powerplants to the aircraft. A powerplant-rated repair station will also need a limited airframe rating to remove or install powerplants on the aircraft.

5. PROPELLER RATINGS AND CLASSIFICATIONS UNDER § 145.59. See Table 161-3 below.

NOTE: The guidance on limited ratings provided in the airframe section (paragraph 1 above) also applies to limited propeller ratings.

NOTE: Because maintenance procedures, tools, equipment, and technical data may differ

between manufacturers, ASIs must ensure that repair stations obtain the appropriate supporting requirements for the capabilities that the repair station is requesting. The use of tools, equipment, or data from another manufacturer conflicts with part 43 requirements and the FAA does not endorse these practices.

TABLE 161-3. PROPELLER RATINGS AND CLASSIFICATIONS UNDER § 145.59

Rating	Class	Definitions and Notes
Propeller	<i>Class 1:</i> All fixed pitch and ground adjustable propellers of wood, metal, or composite construction	May perform maintenance and alterations on propellers, but not to adjoining airframe or powerplant components.
	<i>Class 2:</i> All other propellers, by make	A propeller-rated repair station will also need a limited powerplant rating to remove or install propellers on the aircraft.

7. RADIO AND INSTRUMENT RATINGS AND CLASSIFICATIONS UNDER § 145.59.

A. The radio rating is divided into communication, navigation and radar classes. (See Table 161-4 below.) The first two classes, communication and navigation, are based on their intended function in the airplane whereas the radar class is based on a specific technology or mode of operation. Modern avionics equipment typically integrates communications and navigation functions into a single appliance. Also, radar equipment or a radio that operates using pulse technology also serves communication and/or navigation functions. The combination of functionality and operations of these articles may require the repair station to attain a rating for all three classes dependent upon the complexity of the article.

B. The instrument rating is divided into four classes; mechanical, electrical gyroscopic, and

electronic; based on the article's general principles of operation. Again, as stated in the above paragraph multiple class ratings may be necessary to perform repairs on these articles.

NOTE: Because maintenance procedures, tools, equipment, and technical data may differ between manufacturers, ASIs must ensure that repair stations obtain the appropriate supporting requirements for the capabilities that they are requesting. The use of tools, equipment, or data from another manufacturer conflicts with part 43 requirements and the FAA does not endorse these practices.

NOTE: The guidance on limited ratings provided in the airframe section (paragraph 1 above) also applies to limited radio and instrument ratings.

TABLE 161-4. RADIO AND INSTRUMENT RATINGS AND CLASSIFICATIONS UNDER § 145.59

Rating	Class	Definitions and Notes
Radio	<i>Class 1: Communication equipment</i>	Radio transmitting and/or receiving equipment used in an aircraft to send or receive communications in flight, including auxiliary and related aircraft inter-phone systems, electrical or electronic inter-crew signaling devices, and similar equipment. Does not include equipment for navigating or aiding navigation of aircraft.
	<i>Class 2: Navigational equipment</i>	A radio system used in an aircraft for en route or approach navigation. This does not include equipment operated on pulsed radio frequency principals, or equipment used for measuring altitude or terrain clearance.
	<i>Class 3: Radar equipment</i>	An aircraft electronic system operated on radar or pulsed radio frequency principles.
Instrument	<i>Class 1: Mechanical</i>	A diaphragm, bourdon tube, aneroid, optical, or mechanically-driven centrifugal instrument used on aircraft to operate aircraft, including tachometers, airspeed indicators, pressure gauges drift sights, magnetic compasses, altimeters, or similar mechanical instruments.
	<i>Class 2: Electrical</i>	Self-synchronous and electrical indicating instruments and systems, including remote indicating instruments, cylinder head temperature gauges, or similar electrical instruments.
	<i>Class 3: Gyroscopic</i>	An instrument or system using gyroscopic principles and motivated by air pressure or electrical energy, including automatic pilot control units, turn and bank indicators, directional gyros, and their parts and flux gate and gyrosyn compasses.
	<i>Class 4: Electronic</i>	An instrument whose operation depends on electron tubes, transistors, or similar devices, including capacitance type quantity gauges, system amplifiers, and engine analyzers.

9. ACCESSORIES RATINGS AND CLASSIFICATIONS UNDER § 145.59. The accessory rating is divided into mechanical, electrical, and electronic classes based on an article's principle of operation. (See Table 161-5 below.) The combination of functionality and operations of these articles may require the repair station to attain a rating for all three classes, depending on the complexity of the article.

NOTE: Because maintenance procedures, tools, equipment, and technical data may differ between manufacturers, ASIs must ensure that

repair stations obtain the appropriate supporting requirements for the capabilities that they are requesting. The use of tools, equipment, or data from another manufacturer conflicts with part 43 requirements and the FAA does not endorse these practices.

NOTE: The guidance on limited ratings provided in the airframe section (paragraph 1 above) also applies to limited accessory ratings.

TABLE 161-5. ACCESSORIES RATINGS AND CLASSIFICATIONS UNDER § 145.59

Rating	Class	Definitions and Notes
Accessory	<i>Class 1: Mechanical</i>	An accessory that depends on friction, hydraulics, mechanical linkage, or pneumatic pressure for operation, including aircraft wheel brakes, mechanically driven pumps, carburetors, aircraft wheel assemblies, shock absorber struts, and hydraulic servo units.
	<i>Class 2: Electrical</i>	An accessory that depends on electrical energy for its operation, and a generator, including starters, voltage regulators, electric motors, electrically driven fuel pumps, magnetos, or similar accessories.
	<i>Class 3: Electronic</i>	An accessory that depends on the use of an electron tube, transistor, or similar device, including supercharger, temperature, air conditioning controls, or similar electronic controls.

11. LIMITED SPECIALIZED SERVICE RATINGS, § 145.61.

A. Limited specialized service ratings are issued to an applicant or a certificated repair station that performs specific processes associated with the maintenance, preventive maintenance, or alterations of an article. Generally, limited specialized service ratings are issued for maintenance functions which are performed in accordance with an approved process specification. A limited specialized service rating allows a repair station to perform, and approve for return to service, specific processes associated with the maintenance, preventative maintenance or alteration of articles.

B. All repair stations that have a limited specialized service rating use process specifications, in lieu of manufacturer's maintenance data, in the performance of maintenance or alterations. However, just because a repair station uses a process specification does not mean the repair station needs a limited specialized service rating. It is inappropriate for an ASI to initiate action to alter a repair station's ratings and OpSpecs based solely on the repair station use of a process specification.

C. The process specification must involve a repair process or work scheme that is novel, unique, or unusual in application, for which the manufacturer's data is not used for approving an article to its original condition, and that specifies repair limits. The repair station's OpSpecs must contain the specification used

in performing that specialized service. The specification could be a military-, civil-, or applicant-developed specification that was approved by the FAA. Specialized services would include but not be limited to welding, heat treating, plating, and plasma spraying.

NOTE: An example of a novel and unique procedure for which a limited specialized service rating would be issued is the inspection of turbine blades using Krypton gas. This is a unique procedure not normally found or used in industry. The specialized service rating should only be given if the process or procedure is unique, as explained in this example.

D. The limited specialized service rating would require a repair station to have the housing, facilities, equipment, tools, trained personnel, and data to perform the process on an aviation article. The process specification on the OpSpecs would set forth the minimum standards for performing the generic process (specialized service). For example, the process specification would include an explanation of the housing, facilities, equipment, tools, trained personnel, and data necessary for the overall process. The applicable manufacturer's maintenance manual, air carrier manual, or other data acceptable to or approved by the FAA would define the specific parameters associated with performing the process on the particular aviation article.

CHAPTER 162. PROCEDURES FOR CERTIFICATING PART 145 REPAIR STATIONS/SATELLITES LOCATED WITHIN THE UNITED STATES AND ITS TERRITORIES

SECTION 1. BACKGROUND

1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

A. Maintenance: 3230

B. Avionics: 5230

3. OBJECTIVE. This chapter provides guidance for evaluating an applicant for certification of a Title 14 of the Code of Federal Regulations (14 CFR) part 145 repair stations/satellites.

5. THE CERTIFICATION PROCESS. This process provides for interaction between the applicant and the Federal Aviation Administration (FAA) from initial inquiry to certificate issuance or denial of repair station within the territories of the United States. It ensures that programs, systems, and intended methods of compliance are thoroughly reviewed, evaluated, and tested. The certification process consists of five phases:

- Preapplication Phase
- Formal Application Phase
- Document Compliance Phase
- Demonstration and Inspection Phase
- Certification Phase

A. Preapplication Phase.

(1) Preapplication Meeting. The preapplication meeting should be held in the district office. This will allow the applicant to become familiar with the assigned FAA personnel. This meeting should also provide the FAA with a point of contact with the applicant. Open discussion on the applicant's intent should take place, and the FAA should help answer any questions the applicant has regarding the application process. During the preapplication meeting, the following items should be discussed:

(a) Preapplication Statement of Intent (PASI), FAA Form 8400-6.

i. An applicant should conduct a thorough review of the appropriate regulations and advisory material to provide guidance for personnel, facility, equipment, and documentation requirements. As a result of this review, the applicant must address, in the PASI, how these requirements will be met.

ii. The PASI will be used by the Manager of the Flight Standards District Office (FSDO) or their designee to evaluate the complexity of the proposed operation. This allows the establishment of the certification team to be based on the complexity of the certification. A certification project manager (CPM) will be designated as the principal spokesperson for the FAA during certification.

NOTE: Submittal of the PASI by the applicant shows an intent to initiate the certification process.

(b) How to complete FAA Form 8310-3, Application for Repair Station Certificate and/or Rating.

(c) Formal application attachments, including:

i. Repair station manual. This manual will establish how a certificated repair station will conduct business on a daily basis and comply with §§ 145.207 and 145.209.

ii. Quality control manual. This manual will ensure that any article(s) repaired or maintained by a repair station or its contractors will meet the airworthiness criteria established in § 145.211.

iii. Letter of compliance. The letter of compliance will ensure that all applicable regulatory requirements are addressed during the certification process. This is accomplished by listing, in sequence, each section of part 145. After each section, there must be a brief narrative or specific reference to a manual/document that describes how the applicant will comply with that regulation. The letter of compliance must be reviewed to ensure that the applicant has a clear

understanding of the regulation and that the proposed method of compliance meets the intent of the regulation.

(d) *Repair Station and Quality Control Manual Advisory Circular (AC)*. Encourage the applicant to use AC 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals, for guidance in developing the manuals. The manual should allow the user to understand its content without further explanation and must not contradict any regulatory requirements.

NOTE: It is the applicant's responsibility to develop manuals and procedures that ensure safe operating practices and compliance with the rules. The team can offer suggestions for improvement but must not "write" the material.

(2) *Personnel Requirements (§ 145.151).*

(a) Each repair station must have the management personnel necessary for the scope and complexity of its organization. The regulation requires an accountable manager, supervisory personnel, inspection personnel, and certificated personnel to approve the articles it maintains for return to service. It may be necessary for the repair station to have other management or supervisory personnel that is not regulatory.

(b) For non-certificated employees performing maintenance functions, abilities are determined based on their training, knowledge, experience, or practical testing.

(c) Qualifications for supervisory and inspection personnel, and those personnel authorized to approve an article for return to service, must meet the requirements of part 65 and §§145.153, 145.155, and 145.157. These personnel must be able to speak, read, write, and understand English.

(d) Inspection personnel who are not authorized to approve articles for return to service need only read, write, and understand English. (Ref. part 145, § 145.155)

B. Formal Application Phase. To begin the formal application phase, the team will receive the application and attachments. As a rule, the team will meet with the applicant after receiving the formal application package. All questions about the proposed operation, formal application, and attachments should be resolved

at this time. The meeting should consist of the certification team members and all key management personnel from the applicant's organization.

NOTE: The legal name and address of the owner should be determined at this point.

C. Document Compliance Phase. In this phase, the application is thoroughly reviewed for approval or disapproval, and the manual and related attachments are reviewed for acceptance or rejection. This review ensures conformity to the applicable regulations and safe operating practices. This phase is done in the district office by the certification team.

D. Demonstration and Inspection Phase. In this phase, the certification team ensures that the applicant's proposed procedures are effective and that facilities and equipment meet regulatory requirements. The CPM must decide if demonstrations will be required.

E. Certification Phase.

(1) *Issuance.* Once the applicant meets the regulatory requirements of part 145, the certification team will issue the repair station certificate and operations specifications (OpSpecs) with the appropriate ratings.

(2) *Duration.* A certificated repair station located in the United States has no expiration date.

7. SATELLITE REPAIR STATIONS.

A. Satellite Repair Stations. A certificated repair station under the managerial control of another certificated repair station may operate as a satellite repair station if it meets all the requirements of § 145.107.

NOTE: A satellite repair station may not be located in a country other than the domicile country of the certificated repair station with managerial control.

(1) The precertification number of a satellite facility coincides with the parent's repair station number. Advise AFS-620 that a satellite repair station number is required.

(2) Each satellite repair station is to be considered as a stand-alone operation and is required to meet all the requirements of § 145.107.

B. A repair station may interchange personnel anywhere in its system, as long as:

(1) Personnel are identified on the station roster;

(2) The repairman's certificate shows the certificate number of the certificated repair station with managerial control; and

(3) Inspection personnel are designated and available at the satellite station any time a determination of airworthiness or return to service is made.

NOTE: Many corporations with multiple repair stations and satellite repair stations are consolidating their operations, quality control systems, manuals, and recordkeeping systems. It is essential that principal inspectors coordinate their efforts when notified that the certificated repair station with managerial control and its satellite facilities desire standardized systems.

9. AMENDMENT TO OR TRANSFER OF CERTIFICATE. Section 145.57 specifically requires a repair station to submit a new application in the following situations:

A. The holder of a repair station certificate must apply for a change to its certificate if the certificate

holder changes the location of the repair station or requests to add or amend a rating. The FAA must be notified in advance and may prescribe conditions the repair station must follow while moving to the new address/location.

B. If the holder of the repair station certificate sells or transfers its assets, the new owner must apply for an amended certificate in accordance with § 145.51. There are occasions when repair station ownership changes without changing the facilities and personnel.

NOTE: The inspector should recommend a new certificate number due to Freedom of Information Act (FOIA) and liability issues. Aviation safety inspectors (ASI) should inform prospective owners that they may be held liable for the work performed under previous management if they keep the same certificate number. New owners must stipulate in writing that they clearly understand the potential of release of information under FOIA before being allowed to retain the old certificate number.

NOTE: ASIs should contact their regional general counsel office when faced with questions concerning whether limited liability corporations (LLC) or changes in stockholder ownership constitute a transfer of repair station assets.

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SECTION 2. PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites:

- Knowledge of the regulatory requirements of 14 CFR part 145
- Successful completion of Airworthiness Inspector's Indoctrination Course for General Aviation and Air Carrier Inspections
- Successful completion of the Airworthiness Inspection/Surveillance of Foreign/Domestic Repair Stations Course and the on-the-job training (OJT) program related to part 145

B. Coordination. This task requires coordination among the ASIs (airworthiness). Multiple regional coordination may be required.

3. REFERENCES, FORMS, AND JOB AIDS.

A. References:

- 14 CFR parts 29, 39, 43, 45, 65, 91, 121, 125, and 135
- AC 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals
- FAA Order 8300.10, Airworthiness Inspector's Handbook; vol. 2, ch. 161, 164, and 165

B. Forms:

- FAA Form 8000-4, Air Agency Certificate
- FAA Form 8000-4-1, Repair Station Operations Specifications
- FAA Form 8060-4, Temporary Airman Certificate
- FAA Form 8310-3, Application for Repair Station Certificate and/or Rating
- FAA Form 8400-6, Preapplication Statement of Intent
- FAA Form 8610-2, Airman Certificate and/or Rating Application, if applicable

C. Job Aids. None.

5. PREAPPLICATION PHASE.

A. Respond to an initial inquiry for a repair station certificate or satellites.

B. Discuss with the applicant the following subjects, to include:

(1) The necessary technical expertise required by the applicant's proposed organization, to include the following:

- Aviation-related experience
- Proposed organizational structure
- Knowledge of the specific maintenance functions to be performed

(2) The rating required for the type of work to be accomplished.

(3) The requirements for sufficient personnel to meet the demands of the proposed repair station. This includes at least one certificated person with appropriate ratings that coincide with the ratings sought.

NOTE: In most cases, the supervisor and the person authorized to return an article to service must be certificated under 14 CFR part 65. In a small organization, the certificated person could perform both functions.

(4) Facility requirements for the ratings sought, to include:

- The need for ventilation, lighting, and control of temperature, humidity, and other climatic conditions to ensure personnel can perform maintenance as required by this part.
- The size of the facility.
- Manufacturers' recommended or equivalent test equipment.
- Special tools, etc.

(5) The requirements for current technical data appropriate for the work to be performed. The following are considered to be technical data:

- Airworthiness Directives (AD)
- Instructions for Continued Airworthiness
- Maintenance Manuals

- Overhaul Manuals
- Standard Practices Manuals
- Service Bulletins
- Other applicable data acceptable to or approved by the FAA

(6) The requirement to provide the FAA with a point of contact.

C. The district office will furnish FAA Form 8400-6 (PASI) to the applicant with instructions for completion. The applicant will be advised to submit the completed PASI to the district office. The applicant will be informed that the certification process cannot continue until the PASI is reviewed and accepted.

(1) The FAA should advise the applicant of the complexity of the process and provide the applicant with an estimated time frame for the completion of the project. (This is a recommendation only; the time frame allows the applicant the ability to make the appropriate business decisions and is also dependent on the applicant's ability to comply with the requirements.)

(2) The applicant should be advised to develop a time line so that all involved are aware of their commitments and obligations.

NOTE: The ASI should advise the applicant that there are time restrictions for processing applications due to FAA resource availability. An application for certification must not remain dormant. A lack of applicant activity for 90 days during the certification process will result in termination of the application.

D. Initiate the Certification Process.

(1) The district office will review the PASI for acceptance and completeness. If the PASI is acceptable the district office will notify the regional office of the pending application.

(2) The inspector will obtain the precertification number from AFS-620.

(3) The inspector will check the "Information only" block and enter the date the PASI was received and reviewed by the office.

(4) In the "Remarks" section, enter "Proceeding with formal certification" and show the precertification number. Normally the precertification

number will be the final certification number with a letter added that identifies the number as a precertification. This is done to allow the applicant the ability to develop draft documents they may be required to include in the repair station manual (i.e., return to service tags).

(5) The district office manager or designee will assign an inspector or a team of inspectors (depending on the complexity of the application) to the certification process. The manager will also designate an inspector as the CPM.

(6) Application for a satellite repair station certification requires coordination between the office with geographic responsibility and the certificate-holding district office (CHDO) of the certificated repair station that has managerial control, if located outside the applicant's district office. The FAA intends that the CHDO for the repair station with managerial control also hold the satellite's repair station certificate. Surveillance will be conducted by the geographic FSDO at the request of the CHDO.

(7) The CPM will contact the applicant to arrange a preapplication meeting.

E. Conduct a Preapplication Meeting. Meet with the applicant to discuss questions concerning the certification process, regulatory requirements, the formal application and attachments, etc. Accomplish the following during the meeting(s):

(1) Discuss the regulations applicable to the proposed maintenance operation.

(2) Provide the applicant with the following material:

(a) A copy of AC 145-9;

(b) A copy of FAA Form 8310-3; and

(c) Copies of FAA Form 8610-2, if applicable.

(3) Inform the applicant that a formal application package for a repair station certificate within the United States and its territories must contain the following material:

(a) A completed FAA Form 8310-3;

(b) A copy of the repair station manual and quality control manual in a format acceptable to the FAA. If the manual or manuals submitted are in electronic media format, they must be compatible with

FAA electronic capabilities and free of any programs that would adversely affect that capability.

NOTE: Electronic media must be compatible with the CHDO's system. If an applicant's media is not compatible then it cannot be considered acceptable by the FAA. AC 120-78, Acceptance and Use of Electronic Signatures, Electronic Recordkeeping Systems, and Electronic Manuals, provides guidance for the use of electronic media.

(c) A letter requesting the application be processed and indicating when facilities, equipment, material, and data will be ready for formal inspection;

(d) A letter of compliance;

(e) An application for repairman certificate and letter of recommendation, if applicable;

(f) When a Limited Rating is requested, the make and model of the particular item(s) to be maintained and the nature of the work to be performed;

(g) When approval of a Class 2 Propeller Rating is being sought, a list by make of the propeller; and

(h) When a request is made for a limited Specialized Services, and the specification is one developed by the applicant, advise the applicant that the specification must be reviewed by the FSDO and the ACO, which may cause some delay in the repair station certification process.

(4) The FAA inspector/team will evaluate the results of the preapplication meeting; if found acceptable, continue to next phase.

7. FORMAL APPLICATION PHASE.

A. Receive the Formal Application. Ensure that all documents have been submitted and are complete.

B. Evaluate the Application Package. Based on the initial survey of the application package, a decision must be made whether or not to continue with the certification process.

C. Conduct an Application Meeting. Any open questions concerning the package must be answered before proceeding to the next phase. This should be done in the most effective way possible, e.g., meetings or correspondence.

9. DOCUMENT COMPLIANCE PHASE.

A. Review the Application Package. Review the content of each submitted document for regulatory compliance. The documents to be reviewed include:

(1) A completed FAA Form 8310-3;

(2) Repair station manual;

(3) Quality control manual;

(4) Training manual;

(5) The letter of compliance;

(6) Application for repairman certificate and letter of recommendation, if applicable;

(7) The list of makes and models of the particular item(s) to be maintained and the nature of the work to be performed for any Limited Ratings;

NOTE: Normally the FAA will not issue a class rating on an initial certification. All new applications should be issued a limited rating until such time as the repair station performs enough work to establish a representative number of make and models that would qualify the repair station for a class rating. The principal inspector should exercise discretion when using the term "representative number" as this will vary with the type of application and the depth and complexity of the work they perform. An Airframe Class 4 rating would normally be issued when the applicant demonstrates the ability to maintain one of each make in that class (i.e., Boeing 747, Airbus A300, or MD-11). An Accessory, Radio, Instrument, etc. class rating would differ from the airframe rating because of the various makes/models of valves, radios, instruments, and other articles that are very similar in design and function. The issuance of a class rating would be at the discretion of the applicant and agreeable to the ASI when the applicant has demonstrated the capability to maintain several different articles.

(8) The list by make of the propeller for a Class 2 Propeller Rating;

(9) A copy of the approved specification for the work to be performed for a Specialized Service Rating, when applicable; and

(10) A copy of a capabilities list if appropriate (§ 145.215).

B. Document any Deficiencies. If deficiencies are found in any document, return it to the applicant with a letter outlining the deficient areas. Inform the applicant that the certification process will not continue until all deficiencies are resolved.

11. DEMONSTRATION AND INSPECTION PHASE.

A. Coordinate and Schedule an Inspection. Coordination is required between the CPM, team members, and the applicant.

(1) During the inspection phase the team should verify that the repair station manual and the quality control manual are followed.

(2) The team should also use the repair station letter of compliance to confirm the facility meets all the requirements of the regulations.

B. Perform a Housing and Facility Inspection. During the Demonstration and Inspection Phase, inspect the repair station facilities to ensure that the work being done is protected from weather elements, dust, and heat. Ensure that the control of temperature, humidity, and other climatic conditions allow personnel to perform maintenance functions to the standards required by this part (refer to vol. 2, ch. 165). In addition, inspect the following:

NOTE: During initial certification, all tools and equipment must be in place at the time of certification or rating approval by the FAA (§ 145.51(b)).

(1) The inspection system (vol. 2, ch. 164) to ensure:

(a) Employees are familiar with and are capable of performing their assigned duties;

(b) Facilities are adequate to perform the functions as defined in the repair station and quality control manuals; and

(c) The repair station has in place a quality control system which ensures the articles upon which the repair station or any of its contractors perform a maintenance function are airworthy.

(2) Maintenance recordkeeping system to ensure compliance with part 43 and § 145.219.

(3) The system for reporting serious defects or unairworthy conditions to ensure compliance with § 145.221.

(4) Tooling and equipment are properly stored and maintained in good working order. Inspect for the following:

(a) Calibration is performed at established intervals and meets requirements of § 145.109.

(b) If special equipment and tools are obtained as needed in accordance with § 145.109, verify that a contract is available for review to ensure that the tools and equipment will be made available upon the repair station's request.

(5) *Material.* Ensure that all materials needed for the rating are located on the premises and under the repair station's control when work is being done.

(a) Ensure that the repair station has the proper controls for stored material and a recordkeeping system that has document traceability back to the place of purchase.

(b) Traceability of all materials in the supply room must have documentation to show the material qualification (i.e., invoice, process specifications, supplier qualifications).

(c) If necessary, a repair station surveillance program of its suppliers to meet the above will meet these requirement.

(6) Calibration Standards.

(a) The calibration standards of all test and measuring equipment manufactured in the United States are required to meet the equipment manufacturer's calibration standards.

(b) Foreign manufactured measuring and test equipment must meet the calibration standards of the manufacturer.

(c) Test and measuring equipment (equivalent) manufactured by a repair station must meet the calibration standards recommended by the manufacturer of the article being measured or tested. This type of test equipment calibration would be expected to be traceable to a standard acceptable to the FAA.

NOTE: An Aircraft Engineering Division, AIR-100 memorandum dated December 21, 1999, states that "Designated Engineering Representative (DER) may not approve or

determine equivalency of tooling and test equipment.” Furthermore, neither the FAA nor a DER may approve equipment and/or test apparatus. The FAA and DERs may only make an acceptance of functional *equivalency* for special equipment or test apparatus. It is important to emphasize that the burden of demonstrating *equivalency* is borne by the repair station—not the FAA.

C. Evaluate Maintenance Organization. Ensure the following:

(1) There is a sufficient number of personnel to satisfy the volume and type of work to be performed, as required by part 145, subpart D;

- Ensure an employee is designated as the Accountable Manager.
- Ensure qualified personnel are provided to plan, supervise, perform, and approve for return to service the work for which it is rated.
- Ensure it has a sufficient number of employees with training or knowledge and experience in accomplishing the work being performed.
- Determine the abilities of its non-certificated employees performing maintenance functions based on training, knowledge, experience, or practical tests.

(2) A personnel roster(s) is available that includes management, supervisory, and inspection personnel responsible for the repair station operations, oversight of maintenance functions, and personnel authorized to sign a maintenance release for approving an article for return to service (refer to part 145, § 145.161); and,

(3) Management, supervisory, and inspection personnel employment summaries for those persons listed in paragraph 11C(2) are available (refer to § 145.161).

D. Analyze Deficiencies.

(1) If deficiencies are noted, notify the applicant in writing. If appropriate, meet with the applicant to review deficiencies in detail; and

(2) Corrective action must be taken and the CPM notified in writing by the applicant in order for the certification process to continue. Each deficiency

and corrective action must be fully documented and recorded in the certification file.

13. CERTIFICATION PHASE.

A. Prepare Certificates. When the applicant has met all regulatory requirements, the CPM will accomplish the following:

(1) Complete blocks 6-9 of FAA Form 8310-3, to show:

- Findings and recommendations
- Any remark or discrepancy noted during inspection
- Date of inspection
- Office and signature of the CPM

(2) Prepare FAA Form 8000-4, which must be signed by the district office manager.

(3) Prepare FAA Form 8000-4-1. The OpSpecs, showing the limitations to be issued, will be signed by the appropriate Airworthiness ASI. These limitations may be listed on separate operations specifications pages.

(4) If applicable, issue FAA Form 8060-4 with appropriate ratings.

NOTE: Air agency certificates and OpSpecs are legal documents. Language should clearly specify the authorizations, ratings, and/or limitations being approved. When filling out these forms, there must not be any erasures, strikeovers, or typographical errors on the completed document.

B. Air Agency Certificates. The certificate will include the following information:

(1) After “Number,” insert the certificate number assigned to the facility. This will be in accordance with the current air agency numbering system.

(2) Under “This certificate is issued to,” insert the official name of applicant’s business. This must be the same as shown on the application form.

(3) Under “whose business address is,” insert the address/location of the applicant’s business. This must be the same as shown on the application form.

(4) After “to operate an approved,” insert the words “repair station.”

(5) Under “with the following ratings:” insert the ratings issued. The ratings must be listed by the general category, such as airframe, powerplant, radio, etc.

(6) If a repair station is issued a limited rating, then it must be listed as such on the certificate (e.g., limited radio).

(7) Insert today’s date; it becomes the original date of the certificate.

(8) After “shall continue in effect,” for repair stations located in the United States, insert the word “indefinitely.”

(9) Under “Date issued:” insert the issuance date of the certificate. This will be the date of original certification.

(10) Under “By direction of the Administrator,” insert the signature of the office manager and office identifier.

C. Operations Specifications.

(1) Following “The rating(s) set forth on Air Agency Certificate Number,” insert the air agency certificate number from the respective certificate.

(2) Following “is/are limited to the following,” insert, as applicable:

(a) Class ratings.

(b) Limited ratings, to include makes, models, or parts.

(c) Limited rating for specialized services, to include the specification used.

(d) Line Maintenance authorization (the repair station must meet the requirements of § 145.205(d)).

(e) Following “Delegated authorities,” insert “none.”

(f) Under “Date issued or revised,” insert the date the inspection was satisfactorily completed.

(g) Under “For the Administrator,” insert the signature block of the assigned inspector.

D. Prepare Certification Report. Ensure that a certification report is prepared. The report must

include the name and title of each ASI on the certification team. The report is signed by the CPM and contains at least the following:

- A copy of the PASI
- FAA Form 8310-3, completed
- A letter of compliance
- A copy of the Air Agency Certificate issued
- A copy of the issued operations specifications
- A copy of any Temporary Airman Certificate issued
- A summary of all discrepancies encountered during the inspection

15. TASK OUTCOMES.

A. File PTRS Data Sheet.

B. Completion of the certification task will result in one of the following:

- Issuance of a certificate and operations specifications.
- A letter to the applicant indicating that the certificate is denied.
- A letter to the applicant confirming termination of the certification process.

C. Distribute Certification Report. Distribute the completed report as follows:

- Retain the original certification report in the district office.
- Forward one copy of the certificate report to all involved district and regional offices.

D. Document Task. File all supporting paperwork in the certificate holder/applicant’s office file and update the Vital Information System (VIS).

17. FUTURE ACTIVITIES. The district office must ensure that there is an orderly transition from the certification process to certificate management. Perform follow-up and surveillance inspections as required.

CHAPTER 163. INTERNATIONAL FIELD OFFICE PROCEDURES FOR CERTIFICATING/RENEWING/AMENDING A PART 145 REPAIR STATION LOCATED OUTSIDE THE UNITED STATES AND ITS TERRITORIES

SECTION 1. BACKGROUND

1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

A. Maintenance: 3230

B. Avionics: 5230

3. OBJECTIVE. This chapter provides guidance for evaluating an applicant for certification/renewal/amendment of a Title 14 of the Code of Federal Regulations (14 CFR) part 145 repair station located outside the United States.

NOTE: For the purposes of this chapter, repair station applicants from part 145 facilities located outside the United States may be referred to as “applicants,” “repair stations,” or “facilities.”

5. INTRODUCTION. This chapter provides the procedures International Field Offices (IFO) must follow while certificating or performing surveillance for part 145 repair stations located outside the United States. Each Aviation Safety Inspector (ASI) assigned to an IFO must be conscious of the sensitive issues associated with working in the international environment. Inspectors must conduct themselves with the highest degree of professionalism while assigned outside the United States. An inspector must be courteous and respectful when dealing with foreign nationals and the various officials of the foreign National Aviation Authorities (NAA). Each inspector should understand that while working for the Federal Aviation Administration (FAA), his or her every action is representative of the U.S. Government. The FAA expects IFO employees to be fully aware that they are guests in a foreign country, and to recognize national culture within their working environment. The FAA expects IFO inspectors to observe the above guidance during all phases of the certification/renewal/amendment process.

A. This chapter is divided into four sections. Section 1 includes introductory material, such as

general descriptions of the five-phase certification/renewal/amendment process, new requirements for satellite repair stations, and special situations and provisions unique to IFOs.

B. Section 2 describes initial certification procedures.

C. Section 3 describes certificate renewal procedures.

D. Section 4 describes certificate amendment procedures and geographic authorizations.

7. THE CERTIFICATION/RENEWAL/ AMENDMENT PROCESS.

A. This process provides for interaction between the applicant and the FAA, from the initial inquiry to certificate issuance or denial of the repair station application. These procedures ensure that programs, systems, and intended methods of compliance are thoroughly reviewed, evaluated, and tested. The certification/renewal/amendment process consists of five phases:

- (1) Preapplication Phase
- (2) Formal Application Phase
- (3) Document Compliance Phase
- (4) Demonstration and Inspection Phase
- (5) Certification Phase

B. Preapplication Phase.

(1) Preapplication Meeting. The preapplication meeting should be held in the IFO. This will allow the applicant to become familiar with the assigned FAA certification team. This meeting should also provide the FAA with a point of contact from the applicant's facility. The certification team and applicant should openly discuss the applicant's intent. The FAA should answer any questions the applicant may have regarding the process. During the preapplication

meeting, the FAA and applicant should discuss the following items:

(a) *Preapplication Statement of Intent, FAA Form 8400-6 (PASI)*. The applicant's submittal of the PASI shows its intent to initiate the certification process.

i. An applicant should thoroughly review the appropriate regulations and advisory material. This will allow the applicant to become acquainted with the personnel, facility, equipment, and documentation requirements. After this review, the applicant must address how these requirements will be met when completing the PASI.

ii. The inspector must advise the applicant that a fee is associated with all certification activities, per 14 CFR part 187. The fee includes charges for inspectors' travel, hotels, meals, all transportation, time, and any administrative time required to complete the certification process.

iii. The IFO manager, or the authorized designee, must evaluate the complexity of the proposed operation. This evaluation allows the certification team's establishment to be based on the complexity of the certification. A certification project manager (CPM) will be designated as the principal spokesperson for the FAA during the certification process.

NOTE: Advise the applicant that it must be prepared, when submitting the application, to provide the FAA with documentation demonstrating that the repair station certificate or rating is necessary for maintaining U.S.-registered or U.S.-operated foreign aircraft or components as required by part 145, § 145.51(c).

(b) *Instructions to the Applicant on How to Complete the FAA Form 8310-3, Application for Repair Station Certificate and/or Rating.*

(c) *Discussion of Formal Application Attachments, Including:*

i. *Repair Station Manual*. This manual will establish how a certificated repair station will conduct business on a daily basis and comply with part 145, § 145.207 and § 145.209.

ii. *Quality Control Manual*. This manual will ensure that any article(s) repaired or maintained by a repair station or its contractors will meet the regulatory criteria established in part 145,

§ 145.211. The quality control manual may be incorporated into the repair station manual as a separate section.

NOTE: The quality control manual may be a section of the repair station manual, a separate manual, or a combination of the two, depending on the manual structure. The ASI must stress that all requirements listed in §§ 145.209 and 145.211 must be located in the manual(s) and easily identified.

iii. *Letter of Compliance*. The letter of compliance will ensure that all applicable regulatory requirements are addressed during the certification process. This is accomplished by listing, in sequence, each section of part 145. After each section, the applicant must include a brief narrative or specific reference to a manual/document that describes how it will comply with that regulation. Review the letter of compliance to ensure that the applicant has a clear understanding of the regulation and that the proposed method of compliance meets the intent of the regulation.

iv. *Documentation for Certificate*. Documentation demonstrating the necessity for the certificate or rating as described in § 145.51(c).

(d) *Written Guidance*. Refer the applicant to Advisory Circular (AC) 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals, for guidance in developing the manuals. The manual should allow the user to understand its content without further explanation and must not contradict any regulatory requirements.

NOTE: The applicant is responsible for developing manuals and procedures that ensure safe operating practices and compliance with the rules. The certification team can offer suggestions for improvement but must not "write" the material. The manuals' procedures must reflect the way each repair station conducts its business.

(2) *Personnel Requirements*. Per § 145.151, each repair station must have the management personnel necessary for the scope and complexity of its organization. The regulation requires an accountable manager, supervisory personnel, and inspection personnel. The repair station may need other (non-regulatory) management or supervisory personnel to support its quality system and provide for

a sufficient number of trained and knowledgeable employees as required by § 145.151.

(a) The repair station must determine the abilities of its non-certificated employees who perform maintenance functions based on their training, knowledge, experience, or practical testing. Normally, the FAA will take into consideration personnel certification issued by the NAA where the repair station will be located. However, the FAA reserves the right to conduct individual interviews during the inspection to determine these employees' qualifications.

(b) Qualifications for supervisory, inspection, and those personnel authorized to approve an article for return to service must meet the English language requirements of part 145, §§ 145.157(b) and (c). These personnel must be able to understand, read, and write English. Again, the FAA normally will take into consideration personnel certification issued by the NAA where the repair station will be located. However, the FAA reserves the right to conduct individual interviews during the inspection to determine these employees' qualifications.

C. Formal Application Phase. The formal application phase begins when the team receives the application and attachments. As a rule, the team will meet with the applicant after receiving the formal application package. All questions about the proposed operation, the formal application, and attachments should be resolved now. The certification team members and all key management personnel from the applicant's organization should attend the meeting.

NOTE: The legal name of the owner and the address where the repair station will be located should be determined at this point of certification.

D. Document Compliance Phase. In this phase, the application is thoroughly reviewed for approval or disapproval, and the manual and related attachments are reviewed for acceptance or rejection. This review ensures conformity to the applicable regulations and safe operating practices. This phase is completed in the IFO by the certification team.

E. Demonstration and Inspection Phase. In this phase, the certification team ensures that the applicant's proposed procedures are effective and that facilities and equipment meet regulatory requirements.

The CPM must decide if demonstrations will be required.

F. Certification Phase.

(1) *Certificate Issuance.* When the applicant meets the regulatory requirements of part 145 and has paid the appropriate fees, the certification team will issue the repair station certificate and operations specifications with the appropriate ratings.

NOTE: If the applicant is located in a country with which the United States has a bilateral aviation safety agreement (BASA), the FAA may find that the applicant meets the requirements of part 145 based on a certification from the NAA of that country. This certification must be made in accordance with implementation procedures signed by the Administrator or the Administrator's designee. For additional information, refer to Volume 2, Chapter 170 and 171.

(2) *Certificate Duration.* A certificate or rating issued to a repair station located outside the United States is effective from the date of issue until the last day of the 12th month after the date of issue unless the repair station surrenders the certificate or the FAA suspends or revokes it. The FAA may renew the certificate or rating for 24 months if the repair station has operated in compliance with the applicable requirements of part 145 within the preceding certificate duration period.

9. SATELLITE REPAIR STATIONS.

A. A certificated repair station under the managerial control of another certificated repair station may operate as a satellite repair station if it meets all the requirements of § 145.107.

NOTE: A satellite repair station must be located in the domicile country of the certificated repair station with managerial control. This does not include the claimed territories of a country located outside the geographic boundaries of that country.

(1) The precertification number of a satellite facility matches the parent repair station's number. Advise AFS-620, Aviation Data Systems Branch, that a number for a satellite repair station is required.

(2) Each satellite repair station is considered a stand-alone operation, and is required to meet all of the

requirements of § 145.107. Certification and surveillance will be done in accordance with normal procedures, with the regionally assigned IFO having jurisdiction over that facility.

B. A repair station may interchange personnel anywhere in its system, as long as:

(1) Personnel are identified on each repair station roster;

(2) The qualified personnel are listed on the roster for the repair station with managerial control and the satellite facility; and

(3) Inspection personnel are designated and available at the satellite station when a determination of airworthiness or return to service is made.

NOTE: Many corporations with multiple satellite repair stations are consolidating their operations, quality control systems, manuals, and recordkeeping systems. Principal inspectors must coordinate their certification and surveillance functions when notified that the certificated repair station with managerial control and its satellite facilities desire standardized systems.

11. AMENDMENT TO OR TRANSFER OF CERTIFICATE.

A. Section 145.57 specifically requires a repair station to submit a new application in the following situations:

(1) The holder of a repair station certificate must apply for a change to its certificate if it changes the location of the repair station or requests to add or amend a rating. The FAA must be notified in advance and may prescribe conditions that the repair station must follow when moving to a new address or location.

(2) If the holder of the repair station certificate sells or transfers its assets, the new owner must apply for an amended certificate in accordance with § 145.51. On occasion, repair station ownership changes without changing the facilities and personnel.

NOTE: ASIs should contact their regional general counsel office when asked questions concerning whether Limited Liability Corporations (LLC) or changes in stockholder ownership constitute a transfer of repair station assets.

B. The inspector should recommend a new certificate number due to Freedom of Information Act (FOIA) and liability issues. ASIs should inform prospective owners that they may be held liable for the work performed under previous management. To retain the old number, new owners must stipulate in writing that they clearly understand the potential of release of information under FOIA when retaining the old certificate number.

13. SPECIAL PROVISIONS FOR REPAIR STATIONS LOCATED OUTSIDE THE UNITED STATES. The FAA, NAA, and industry should be aware of the following special provisions and situations.

A. Geographic Authorization. A geographic authorization is an approval provided to an airframe-rated facility to perform maintenance under contract for a U.S. air carrier or for an operator of U.S.-registered aircraft under 14 CFR part 129 at a location other than the facility. The FAA issues a geographic authorization to respond to the maintenance needs of a U.S. air carrier or part 129 operator at a station where the frequency and scope of that maintenance does not warrant permanently staffing and equipping the station for its accomplishment.

B. Perceived Need. Section 145.51(c)(1) requires the applicant to show the necessity for a certificate. The necessity is considered a perceived need. A current or future operational or economic need (perceived need) for the maintenance, preventive maintenance, or alteration of aeronautical articles, subject to the FAA's regulatory oversight, may be performed. The applicant *must* demonstrate that a certificate is necessary. (See Section 2, Certification Procedures, paragraph 5E(4)(e) for a detailed description of the perceived need requirements.)

C. Certificate Renewal. Certificates for repair stations located outside the United States have a limited duration. Initial certification is limited to 12 months from the date the certificate is issued. Thereafter, the FAA may renew the certificate or rating for a 24-month period if the repair station has operated in compliance with the applicable requirements of part 145 within the preceding period.

D. National Certification. FAA policy requires the FAA to seek the country's NAA concurrence on the applicant's request for FAA certification. Generally, the FAA will not issue a repair station certificate that exceeds the scope and limitations of the

NAA's approval, as applicable. The FAA will request a copy of the applicant's NAA certificate and limitations document. Some countries might not issue repair station certifications; in such instances, part 145 does not prohibit the FAA from issuing a certification.

E. Personnel Certification. The personnel certification requirements of 14 CFR part 65 are not required for supervisors or inspectors in repair stations located outside the United States. The FAA reserves the right to interview the applicant's supervisors, inspectors, and/or personnel responsible for final approval for return to service.

NOTE: The FAA may accept the personnel certification requirements in the country where the repair station is located, provided the English language requirements are met.

F. English Language Requirements for Technical Data. The FAA recognizes the national language of the country where the repair station is located. The repair station may convert technical data (e.g., operator's Instructions for Continuous Airworthiness, manufacturers' maintenance manuals, or type certificate holders' continuous airworthiness data) into the national language. Internal documents, such as work cards, work sheets, and shop travelers, may also be converted.

NOTE: The repair station must establish procedures in its repair station manual that ensure that its English-language copy of technical data and any internal documents developed from this technical data are current and complete. The English-language copy of the technical data should be retained at the main base of the repair station. The data must be made available to the FAA upon request.

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SECTION 2. CERTIFICATION PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites:

- Knowledge of the regulatory requirements of 14 CFR part 145
- Successful completion of Airworthiness Inspector's Indoctrination Course for General Aviation and Air Carrier Inspections
- Successful completion of the Airworthiness Inspection/Surveillance of Foreign/Domestic Repair Stations Course and the on-the-job training (OJT) program related to part 145

B. Coordination. This task requires coordination between the ASIs (Airworthiness and Avionics). Additionally, multi-regional coordination may be required.

3. REFERENCES, FORMS, AND JOB AIDS.

A. References:

- 14 CFR parts 39, 43, 45, 65, 91, 121, 125, and 135
- AC 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals
- AC 145-7, Issuance of Repair Station Certificates to Foreign Approved Maintenance Organizations under the Maintenance Implementation Procedures of a Bilateral Aviation Safety Agreement, as amended
- FAA Order 8300.10, Airworthiness Inspector's Handbook, Volume 2, Chapters 161, 164, and 165

B. Forms:

- FAA Form 8000-4, Air Agency Certificate
- FAA Form 8000-4-1, Repair Station Operations Specifications
- FAA Form 8310-3, Application for Repair Station Certificate and/or Rating
- FAA Form 8400-6, Preapplication Statement of Intent

C. Job Aids. None.

5. PREAPPLICATION PHASE.

A. Respond to an initial inquiry for a repair station or satellite facility certificate.

B. Discuss with the applicant the following subjects, which may be discussed during the initial inquiry or the preapplication meeting.

(1) The necessary technical expertise required by the applicant's proposed organization, to include the following:

- (a) Aviation-related experience;
- (b) Proposed organizational structure;
- (c) Knowledge of the specific maintenance functions to be performed;
- (d) Payment requirements, per part 187, including a deposit so the certification process can proceed past application phase;

NOTE: Advise the applicant that a fee will be charged for the initial renewal and each time the repair station certificate is amended.

(e) Providing the FAA with supporting documentation that meets the perceived needs required for the FAA certificate;

(f) Certificate duration period;

NOTE: Advise the applicant that its repair station certificate is effective from the date of issue until the last day of the 12th month after that date, unless the applicant surrenders the certificate or the certificate is suspended or revoked by the FAA. The FAA may renew the certificate for a 24-month period if the repair station has operated in compliance with the applicable requirements of part 145 within the preceding period.

NOTE: Although the regulation allows for a 24-month renewal period, current policy requires ASIs to perform annual surveillance of repair stations, including those facilities located outside the United States, which results in a renewal of the repair station certificate. This renewal ensures the repair station does not extend past the mandatory 24-month certificate period, which would require a new certification action—not a renewal. If a repair station is

granted a certificate renewal for up to 24 months, advise the repair station that the FAA is obligated to conduct annual surveillance and the repair station will be required to pay any fees required by 14 CFR part 187 for the non-renewal year surveillance.

(g) English language personnel requirements; and

(h) English language requirements for technical data.

(2) The requirements for sufficient personnel to meet the demands of the proposed repair station. Advise the applicant that the FAA may interview its supervisors and inspection personnel to confirm their qualifications. The FAA recommends that the supervisors and inspection personnel hold certificates issued by the NAA of the country where the repair station is located, as applicable. However, the certificates are not required by regulation.

(3) Facility and tooling requirements for the ratings sought, to include:

(a) The facility must meet the requirements of § 145.103, including:

- Sufficient workspace and areas to ensure the proper segregation and protection of articles while work is being performed
- Suitable racks, hoists, trays, stands, and other segregation means for the storage and protection of articles undergoing maintenance or alterations
- Sufficient space to segregate articles and materials stocked for installation from articles undergoing maintenance or alteration
- Adequate ventilation, lighting, and control of temperature, humidity, and other climatic conditions to ensure that personnel can perform maintenance as required by this part
- Suitable permanent housing to enclose the largest type and model of aircraft listed on its operations specifications

(b) Manufacturers' recommended or equivalent test equipment.

(c) Special tools, and any documentation that will support the repair station's use of equivalent tooling. (See the Note in Section 2, paragraph 11B(6)(b) for additional guidance on approving equivalent tooling and test equipment.

(4) The requirements for current technical data appropriate for the work to be performed. The following are considered technical data:

- Airworthiness directives
- Instructions for continued airworthiness
- Maintenance manuals
- Overhaul manuals
- Standard practices manuals
- Service bulletins
- Other applicable data acceptable or approved by the FAA

(5) The requirement to provide the FAA with a point of contact.

C. The IFO will furnish FAA Form 8400-6 (PASI) to the applicant with instructions for completion. The CPM will advise the applicant to submit the completed PASI to the IFO. The CPM will inform the applicant that the certification process cannot continue until the IFO reviews and accepts the PASI.

(1) The FAA should advise the applicant of the complexity of the process and provide the applicant with an estimated time frame for the completion of the project. (This is a recommendation only; the time frame helps the applicant make appropriate business decisions and is dependent on the applicant's ability to comply with the requirements).

(2) Advise the applicant that all required documents must be submitted to the FAA in the English language.

(3) Advise the applicant to develop a time line so that all involved are aware of their commitments and obligations.

NOTE: The ASI should advise the applicant that there are time restrictions for processing applications due to FAA resource availability. An application for certification must not remain dormant. A lack of applicant activity for 90 days during the certification process will result in termination of the application.

D. The IFO will review the PASI for acceptance and completeness. If the PASI is acceptable, the IFO will notify the regional office of the pending application.

NOTE: Each IFO will retain and keep current a list of pending applications. Each pending application should be based on submission of a PASI.

(1) The inspector will obtain the pre-certification number from AFS-620.

(2) The inspector will check the “Information only” block and enter the date the PASI was received and reviewed by the IFO.

(3) In the “Remarks” section, enter “Proceeding with formal certification” and show the pre-certification number. (Normally, the pre-cert. number is the same as the final certification number, except that it has a letter added that identifies it as a pre-cert. This allows the applicant to develop draft documents that may be required for inclusion in the repair station manual, such as return to service tags.)

(4) The IFO manager or designee will assign an inspector or a team of inspectors (dependent on the application’s complexity) to the certification process. The manager will also designate an inspector as the CPM.

(5) The CPM will contact the applicant to arrange a preapplication meeting.

E. Conduct a Preapplication Meeting. Meet with the applicant to discuss questions concerning the certification process, regulatory requirements, each item discussed in paragraph 5B, the formal application and attachments, and so forth. Accomplish the following during the meeting(s):

(1) Discuss in detail each of the items identified in paragraph 5B to ensure that the applicant has a complete understanding of the process and procedures.

(2) Discuss the regulations applicable to the proposed maintenance operation.

(3) Provide the applicant with the following material:

- A copy of AC 145-9
- A copy of FAA Form 8310-3

(4) Inform the applicant that a formal application package for a repair station certificate located outside the United States and its territories must contain the following materials:

(a) A completed FAA Form 8310-3 (application).

(b) A copy of the repair station manual and quality control manual for the IFO in a format acceptable to the FAA. Advise the applicant to follow the content of AC 145-9. Also, advise the applicant to develop its manuals as applicable to its repair station. If the manual or manuals are submitted in electronic media format, they must be compatible with FAA electronic capabilities and free of any programs that would adversely affect that capability. (See FAA Order 8300.10, vol. 2, ch. 161 and 164 for additional details).

NOTE: Federal agencies can no longer refuse electronic versions of manuals, forms, record systems, etc. Federal law prohibits agencies from making the use of electronic media more difficult or from requiring additional steps or procedures for users of electronic media. Therefore, all repair station document submissions must be accompanied by a cover letter that describes the submission and is signed by the appropriate manager. ASIs will accept or approve submissions with a cover letter indicating the date; document, manual, or revision number; and an acceptance or approval statement. Additionally, ASIs will reject a certificate holder’s submission using a cover letter that indicates the date; document, manual, or revision number; and a detailed explanation of the discrepancies or non-conformances noted. The acceptance or approval letter should remain with the manual or be kept on file.

(c) A letter requesting that the application be processed and indicating when facilities, equipment, material, and data will be ready for formal inspection.

(d) A letter of compliance.

(e) Documentation confirming perceived need requirement. In the statement of perceived need, the applicant should indicate its need to perform maintenance on or alter/modify aeronautical products subject to U.S. airworthiness regulations in foreign countries, and to obtain a part 145-repair station certificate. The applicant can substantiate this perceived need by including a statement from an

operator of U.S.-registered aircraft or a company that maintains or alters items to be installed on U.S.-registered aircraft, indicating that the repair station's services are required. The perceived need may also be established with documentation from a leasing company or a supplier/distributor showing that the applicant's services are needed. The applicant can confirm in writing that the leasing company or supplier/distributor is doing business with operators of U.S.-registered aircraft.

(f) When a Limited Rating is requested, the make and model of the particular item(s) to be maintained and the nature of the work to be performed.

(g) When a Class 2 Propeller Rating is requested, list it by make and model.

NOTE: When a request is made for a limited Specialized Services Rating, and the specification is one developed by the applicant, advise the applicant that the IFO and the Aircraft Certification Office must review the specification. This may cause some delay in the repair station certification process.

(h) An employee training program approved by the FAA that consists of initial and recurring training. For purposes of meeting the requirements of part 145 beginning April 6, 2005, an applicant must submit a training program for approval in accordance with § 145.51(a)(7) and § 145.163. Applicants prior to that date are not required to submit their training program but may if they so choose.

- The training program must ensure that each employee assigned to perform maintenance, alterations, or an inspection function is capable of performing the assigned task.
- The repair station must document, in a format acceptable to the FAA, individual employees' initial and recurrent training.

(i) The certification fee. The IFO will provide the applicant with an estimate of the approximate cost of the certification process. The fee should be deposited in accordance with the IFO procedures, and under no circumstances should a cash transaction take place. The inspector should not be involved in fee transfers. The fee should be transferred electronically into a bank account established by the

IFO or other government agency account, i.e., the Embassy.

NOTE: At the end of the preapplication meeting, the IFO should have a procedure to start tracking all costs associated with the certification process, in accordance with part 187.

(5) The FAA inspector or team will evaluate the results of the preapplication meeting. If found acceptable, continue to the next phase.

7. FORMAL APPLICATION PHASE.

A. Receive the Formal Application. Ensure that all documents have been submitted and are complete.

B. Verify Fee Deposit. The appropriate fee deposit must be made before proceeding.

C. Evaluate the Application Package. Based on the initial survey of the application package, ensure that all the appropriate documents identified in the preapplication phase (see paragraph B5 of this section) have been received. A team decision must be made on whether to continue with the certification process.

D. Conduct an Application Meeting with the Applicant, as Necessary. The FAA recommends that the applicant meet with the IFO to formally submit its documents in person and discuss any additional questions or open issues. Any unanswered questions or issues concerning the package must be resolved before proceeding to the next phase. This should be done in the most cost-effective way possible, e.g., meetings, tele-conferences, or other correspondence, at the discretion of the CPM.

9. DOCUMENT COMPLIANCE PHASE.

A. Review the Application Package. Review the content of each submitted document for regulatory compliance. The documents to be reviewed include:

(1) A completed FAA Form 8310-3.

(2) The repair station manual. This manual should describe how each function of the repair station performs its intended operation. It should contain samples of all forms, tags, shop travelers, and so forth. It should also identify the location of work orders, work cards, customer list, and so forth. The manual should provide a complete description on how the repair station conducts its business. It should be written plainly enough that its contents are understood

by the repair station's employees. The repair station manual will be used when performing the inspection phase of the certification process. (See § 145.209 for manual content. For any additional information, see AC 145-9 and Chapter 164.)

(3) The quality control manual. This manual may be incorporated as a separate section of the repair station manual; it is not required to be a separate manual. (See § 145.209 for manual content. For any additional information, see AC 145-9 and FAA Order 8300.10, Volume 2, Chapters 161 and 164).

(4) A training program. A certificated repair station must have an employee training program approved by the FAA that consists of initial and recurring training. To meet the requirements of part 145, an applicant must submit a training program for approval, in accordance with § 145.51(a)(7) and § 145.163.

(a) Applicants certificated prior to the effective date of the training program (April 6, 2005) are not required to comply with this requirement but may do so if they choose, prior to the deadline.

(b) A repair station that is certificated before the April 6, 2005 effective date of the training program must submit its program for approval by the last day of the month in which its repair station certificate was issued. For example, if the repair station certificate was issued in December 1995, then the training program would require approval by December 31, 2005.

i. The training program must ensure that each employee assigned to perform maintenance, alterations, or an inspection function is capable of performing the assigned task.

ii. The repair station must document initial and recurrent training of individual employees in a format acceptable to the FAA.

(5) The letter of compliance. The letter must address each section of part 145.

(6) The personnel certification requirements. The applicant must submit a list of personnel that meets the following requirements:

(a) Personnel requirements for a foreign repair station differ from domestic requirements in that airman certificates are not required for supervisory or inspection positions.

(b) Supervisory and inspections personnel in the country where the station is located need not hold a mechanic/airman certificate. Instead, the performance qualifications for supervisory and inspections personnel may be determined based on training, knowledge, experience, or practical tests. The appropriate repair station manager will determine these requirements. The FAA may conduct interviews of the individuals during the inspection phase to verify their qualifications.

(c) Qualifications for supervisory and inspection personnel responsible for return to service include the ability to understand the following:

- Applicable FAA regulatory requirements
- FAA airworthiness directives
- Maintenance and service instructions for the items to be worked
- U.S. Type Certificate (TC) data sheets
- The ability to read, write, and understand the English language

(7) The list of makes and models of the particular item(s) to be maintained and the nature of the work to be performed for any Limited Ratings.

(8) The list, by make, of the propeller for a Class 2 Propeller Rating.

(9) A copy of the approved specification for the work to be performed for a Specialized Service Rating, when applicable. The approval of process specifications will be discussed in paragraph 11, below.

(10) A copy of a capabilities list, if appropriate. Refer to part 145, § 145.215 and Chapter 161 for additional details on capabilities lists.

(11) Line stations authorizations. Airframe-rated repair stations, rated for a complete aircraft (e.g., a 737), may have line station authorization to perform line maintenance for their customers. The line station must be listed on the operations specifications, which must contain the airport address, the address/phone number/fax number of the repair station's facility/office at each airport location, and a brief description of the maintenance services provided.

B. Document Any Deficiencies. Conduct a thorough and comprehensive review of all documents. If deficiencies are found in any document, return it to

the applicant with a letter outlining the deficient areas. Inform the applicant that the certification process will not continue until all deficiencies are resolved. The applicant must provide the FAA with a written response that identifies the approximate date the errors will be corrected and the document resubmitted. The inspectors' letter to the applicant must be as clear and complete as possible to avoid causing delays from documents being mailed back and forth without resolving issues.

11. DEMONSTRATION AND INSPECTION PHASE.

A. Coordinate and Schedule an Inspection.

Coordination is required between the CPM, team members, and the applicant to ensure that the appropriate management personnel are available during the inspection.

(1) *Manuals.* During the inspection phase, the team should verify that the facility follows its repair station manual and the quality control manual.

NOTE: When the repair station manual is located in the work area and is in the national language, the FAA team must be provided with a supervisor or other person who can read the national language version to the team so it can confirm that this version has the same information as the English language version. This same process would apply when the FAA requests review of maintenance records, technical documents, and other material that is part of the certification. (The use of the national language is an option provided to repair stations located outside the United States. If a repair station elects to use the national language, it must provide a method for the FAA to confirm the material is accurate.)

(2) *Letter of Compliance.* The team should use the repair station letter of compliance to confirm that the facility meets all the requirements of the regulations.

(3) *Line Stations.* On an initial repair station certification only, the FAA should visit each location for which the applicant requests a line station authorization. The authorization may not be issued for a location outside the boundaries of the country where the repair station is located.

(4) *Geographic Authorizations.* These may only be issued to a repair station that has been rated for an entire aircraft, e.g., a 757. (See Section 3, Renewal Procedures, for information on certificate renewal procedures. See Section 4, Certificate Amendment Procedures and Geographic Authorizations, for procedures for certificate amendment and geographic authorization.) Normally, on initial certification the FAA will not consider issuing a geographic authorization.

B. Perform a Housing and Facility Inspection.

Inspect the repair station facilities to ensure that the work being done is protected from weather elements, dust, and heat. Ensure that workers are protected to the point that the quality of their work will be unimpaired. (For additional guidance on facilities inspection, refer to FAA Order 8300.10, Volume 2, Chapter 165, Evaluate 14 CFR Part 145 Repair Station's Facilities and Equipment.) In addition, inspect the following:

(1) The inspection system, referring to Chapter 164 to ensure that:

(a) Employees are familiar with and are capable of performing their assigned duties.

(b) Facilities can adequately perform the inspection functions, as defined in the repair station and quality control manuals.

(c) The repair station has in place a quality control system, which ensures that articles are airworthy after the repair station or any of its contractors perform maintenance.

(2) The maintenance recordkeeping system, to ensure compliance with part 145, § 145.219.

(3) The system for reporting serious defects or unairworthy conditions, to ensure compliance with part 145, § 145.221.

(4) The tooling and equipment is properly stored and maintained in good working order. Inspect tools and equipment for the following:

(a) Calibration at established intervals.

(b) If special equipment and tools are obtained as needed in accordance with part 145, § 145.109, verify that a contract is available for review to ensure that the tools and equipment will be made available upon the repair station's request.

(5) The material needed for the rating. Ensure that this material is located on the premises and under the repair station's control when work is being done.

(a) Ensure that the repair station has the proper controls for stored material and a recordkeeping system that has document traceability back to the place of purchase or traceability back to an approved source/vendor. AC 20-62, Eligibility, Quality, & Identification of Aeronautical Replacement Parts (as revised), and AC 21-29, Detecting and Reporting Suspected Unapproved Parts (as revised), will provide additional guidance. Some materials have special handling and storage, recordkeeping, and purchasing requirements (e.g., advanced composite materials and adhesive).

(b) Confirm that the traceable materials in the supply room have documentation to show the material qualification (e.g., invoice, process specifications, supplier qualifications, and so forth).

(c) If necessary, a surveillance program of the facility's suppliers will meet the traceability requirements.

(6) Calibration standards.

(a) The calibration standards of all test and measuring equipment manufactured in the United States are required to meet the equipment manufacturer calibration standards.

(b) Foreign manufactured measuring and test equipment must meet the calibration standards of the manufacturer.

NOTE: The part 145 rule states that tooling is calibrated to a standard acceptable to the Administrator. Those standards may be derived from the National Institute of Standards and Technology (NIST), or to a standard provided by the equipment manufacturer. International Agreements may also be accepted as a means of compliance. A list of International Agreements referred to as Memorandum of Understanding (MOU) or Mutual Recognition Agreement (MRA) may be accessed from the NIST Web site (<http://www.nist.gov/>). Also, the National Voluntary Laboratory Accreditation Program (NVLAP) provides third-party accreditation to testing and calibration laboratories. NVLAP's accreditation programs are established in response to Congressional mandates, administrative actions by the Federal government, or from requests by private-sector organizations. NVLAP is in full conformance

with the standards of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), including ISO/IEC 17025 and Guide 58. NVLAP identifies its accredited laboratories in a published directory, NIST Special Publication 810, which is published on the NIST Web site. Additionally, for foreign equipment, the standard of the country of manufacture may be used if approved by the Administrator. An Exemption Authorization is required if a repair station uses equipment of a foreign manufacturer and the method of calibration it will use is not addressed through a MOU or MRA, or the FAA inspector cannot obtain the validity of the Calibration Laboratory. Exemption authorizations are granted through the issuance of an Exemption per 14 CFR part 11 guidance. Currently, Exemptions of this type are issued for a 2-year period and can be renewed if requested by the repair station.

(c) Test and measuring equipment (equivalent) manufactured by a repair station must meet the calibration standards recommended by the manufacturer of the article being measured or tested. This type of test equipment calibration is expected to be traceable to a standard acceptable to the FAA.

NOTE: An Aircraft Engineering Division, AIR-100 memorandum dated December 21, 1999, states that, "Designated Engineering Representative (DER) may not approve or determine equivalency of tooling and test equipment." Furthermore, neither the FAA nor a DER may approve equipment and/or test apparatus. The FAA and DERs may only make an acceptance of functional equivalency for special equipment or test apparatus. It is important to emphasize that the burden of demonstrating "equivalency" is borne by the repair station and not the FAA.

(d) During initial certification, all tools and equipment must be in place at the time of certification or rating approval for inspection by the FAA (see § 145.51(b)).

C. Evaluate Maintenance Organization. Ensure that:

(1) A sufficient number of personnel is available to satisfy the volume and type of work to be

performed, as required by § 145, subpart D. Also ensure that:

(a) An employee is designated as the accountable manager.

NOTE: JAA Accountable Manager: A manager of a repair station who has corporate authority for ensuring that all maintenance required by the customer can be financed and carried out to the standard required by the JAA full member Authority. A person designated as the JAA accountable manager may also qualify as the FAA accountable manager.

(b) Qualified personnel are provided to plan, supervise, perform, and approve for return to service the work for which the facility is rated.

(c) The facility has a sufficient number of employees with the training or knowledge and experience to accomplish the work being performed.

i. Interview a sampling of supervisors and inspection personnel to ensure that they are able to read, write, and understand the English language.

ii. During the interview, review and ask the supervisors and inspectors questions regarding their knowledge and experience level with the intended operation. (A recommended source for questions is the repair station manual and/or the employees' employment summaries.)

iii. Request to see any NAA maintenance certification the supervisors and inspectors may have been issued by the NAA.

iv. If qualifications remain in question for any individual, bring the concern to the attention of the repair station management and request that they reexamine the employee to confirm his or her qualifications.

(d) The repair station has a written process to determine the abilities of its non-certificated employees performing maintenance functions based on training, knowledge, experience, or practical tests. This process may be incorporated in the repair station manual or in a supplement document, such as a training program.

(2) A personnel roster(s) is available that includes management, supervisory, and inspection personnel responsible for the repair station operations, oversight of maintenance functions, and personnel

authorized to sign a maintenance release for approving an article for return to service (refer to § 145.161).

(3) Management, supervisory, and inspection personnel employment summaries are available for those individuals listed in paragraph 11C(2) (refer to § 145.161).

(4) At the conclusion of the inspection, the FAA must discuss any deficiencies noted during the inspection. This should be an open discussion giving the applicant the opportunity to correct any misunderstandings. This meeting should not be confrontational but should be considered part of the informational process.

D. Additional Maintenance Organization Inspection Items.

(1) *Additional Facilities Fixed Locations.* The inspection procedures are the same as those required for a fixed location. Additional guidance can be found in Chapters 161 and 165.

(2) *Work Performed At Another Location.* The process for this inspection is different from that of additional fixed locations in that a repair is occasionally needed at another location on an emergency basis. The repair station manual should have a procedure that describes how the repair station will meet all the same requirements of its manual, including quality control procedures, when working away from the fixed location. The procedures must also include how the repair station will notify the FAA and gain approval before work is performed. Additional guidance can be found in Chapters 161 and 165.

(3) *Capabilities List.* For a repair station that intends to use a capabilities list, it is not necessary to perform a complete facility inspection for each item on the capability list. A review of each shop area should provide the FAA inspector with enough general information to establish the applicant's ability and compliance posture.

E. Analyze Deficiencies.

(1) If deficiencies are noted, notify the applicant in writing. If appropriate, meet with the applicant to review deficiencies in detail.

(2) The applicant must take corrective action and notify the CPM in writing for the certification process to continue. Each deficiency and corrective

action must be fully documented and recorded in the certification file.

(3) Depending on the severity of the findings, a repeat inspection may be necessary. The CPM will make this decision based on safety issues only; administrative issues are not considered safety issues.

13. CERTIFICATION PHASE.

A. Prepare Certificates. When the applicant has met all regulatory requirements, the CPM will accomplish the following:

(1) Complete blocks 6-9 of FAA Form 8310-3, to show:

- Any remark or discrepancy noted during inspection
- Findings and recommendations
- Date of inspection
- Office and signature of the CPM

(2) Prepare FAA Form 8000-4, Air Agency Certificate, which must be signed by the IFO manager.

(3) Prepare FAA Form 8000-4-1, Repair Station Operations Specifications. The appropriate Airworthiness ASI will sign the operations specifications, which will show the limitations to be issued. These limitations may be listed on a capability list that will be a part of the operations specifications.

NOTE: Air agency certificates and operations specifications are legal documents. The language should clearly specify the authorizations, ratings, and/or limitations being approved. When completed, these forms should have no erasures, strikeouts, or typographical errors.

B. Prepare Air Agency Certificates. The certificate will include the following information:

(1) After “Number,” insert the certificate number assigned to the facility. This will be in accordance with the current air agency numbering system.

(2) Under “This certificate is issued to,” insert the official name of applicant’s business. This must be the same as shown on the application form.

(3) Under “whose business address is,” insert the address/location of the applicant’s business. This must be the same as shown on the application form.

(4) After “to operate an approved,” insert the words “repair station.”

(5) Under “with the following ratings,” insert the ratings issued. The ratings must be listed by the general category, such as airframe, powerplant, radio, etc.

(6) If a repair station is issued a limited rating, then it must be listed as such on the certificate (e.g., limited radio).

(7) When ratings are added or amended, show the date of each issuance in parentheses, following the added or amended rating.

(8) For repair stations located outside the United States, insert the date expiration. Refer to § 145.55. A renewal of a repair station located outside the United States should be issued for an initial certification period of 12 months. Thereafter, at the discretion of the IFO, the certificate will be renewed for a 24-month period from the date of renewal, unless coordinated through the regional office. (See Section 3, Renewal Procedures.)

(9) Under “Date issued,” insert the issuance date of the certificate. This will be the date of original certification.

(10) Under “By direction of the Administrator,” insert the signature of the office manager and office identifier.

(11) This certificate is not transferable, and any major change in the basic facilities or in the location thereof must be immediately reported to the appropriate FAA regional office.

C. Prepare Operations Specifications.

(1) Following “The rating(s) set forth on Air Agency Certificate Number,” insert the air agency certificate number from the respective certificate.

(2) Following “is/are limited to the following,” insert, as applicable:

(a) Class ratings.

(b) Limited ratings, to include makes, models, or parts.

(c) Limited rating for specialized services, including the specification used.

(d) Line Maintenance Authorization. (The repair station must meet the requirements of part 145, § 145.205(d).)

(e) Following “Delegated authorities,” insert “none.”

(f) Under “Date issued or revised,” insert the date the inspection was satisfactorily completed.

(g) Under “For the Administrator,” insert the signature block of the assigned inspector.

D. Prepare Certification Report. Ensure that the certification report is prepared properly. The report must include the name and title of each ASI on the certification team. The report is signed by the CPM and contains at least the following:

- A copy of the PASI
- FAA Form 8310-3, completed
- A letter of compliance
- A copy of the Air Agency Certificate issued
- A copy of the issued operations specifications
- A summary of all discrepancies encountered during the inspection

15. TASK OUTCOMES.

A. File PTRS Data Sheet.

B. Complete the Certification Task. Completion of the certification task will result in one of the following:

NOTE: Verify that the fees have been paid in full. The fee should be deposited in accordance

with part 187 and with IFO procedures. (See Section 2, paragraph 5E(4)(i) for information on processing fees.)

(1) Issuance of a certificate and operations specifications.

(2) A letter to the applicant indicating that the certificate is denied.

(3) A letter to the applicant confirming termination of the certification process.

C. Distribute Certification Report. Distribute the completed report as follows:

(1) Retain the original certification report in the IFO.

(2) Forward one copy of the certificate report to all involved district and regional offices.

(3) Send a letter to the NAA of the country where the repair station is located, advising them that the FAA certificate and operations specifications have been issued. The letter should also request that the NAA advise the IFO any time the NAA takes certificate action or identifies serious concerns against that repair station.

D. Document Task. File all supporting paperwork in the certificate holder/applicant’s office file and update the Vital Information System (VIS).

17. FUTURE ACTIVITIES. The IFO must ensure an orderly transition from the certification process to certificate management. Perform follow-up inspections and surveillance inspections, as required.

SECTION 3. RENEWAL PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites:

- Knowledge of the regulatory requirements of 14 CFR part 145 and completion of repair station course
- Successful completion of the General/Air Carrier Airworthiness Safety Inspectors Indoctrination course, or equivalent
- Previous experience with certification or surveillance of part 145 repair stations

B. Coordination. This task requires coordination between the ASIs (Airworthiness and Avionics). Additionally, multi-regional coordination may be required.

3. REFERENCES, FORMS, AND JOB AIDS.

A. References:

- 14 CFR parts 43, 45, 65, 121, 125, and 135
- AC 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals
- FAA Order 8300.10, Airworthiness Inspector's Handbook, Volume 2, Chapters 161, 162, 164, and 165

B. Forms:

- FAA Form 8000-4, Air Agency Certificate
- FAA Form 8000-4-1, Repair Station Operations Specifications
- FAA Form 8310-3, Application for Repair Station Certificate and/or Rating

C. Job Aids. None.

5. PREAPPLICATION PHASE. The preapplication phase is not required for a renewal of a repair station certificate.

7. FORMAL APPLICATION PHASE.

A. A repair station located outside the United States must renew its certificate 12 months after its initial certification and thereafter no more than 24 months

from the date of its last renewal, unless otherwise specified by the IFO.

NOTE: Although the regulation allows for a 24-month renewal period, current policy requires ASIs to perform annual surveillance of repair stations, including those facilities located outside the United States, which results in a renewal of the repair station certificate. This renewal ensures the repair station does not extend past the mandatory 24-month certificate period, which would require a new certification action—not a renewal.

B. The repair station is responsible for submitting a new application 30 days before the expiration date of its certificate.

C. The IFO must track renewal dates to establish an effective yearly work program.

D. Ensure that all documents for the formal application package have been submitted and are complete. Verify the inclusion of the following:

(1) Completed FAA Form 8310-3.

(2) A statement/document about the repair station's continuing need for the FAA certificate. (See perceived need in Section 1, paragraph 13B.)

(3) List of contractors if changes have been made to it since the repair station's last renewal. A copy of those changes must be included in the package.

(4) Repair station manual/quality control manual, if either of the manuals has been revised since the repair station's last renewal. A copy of the revision must be provided with the application package.

9. DOCUMENT COMPLIANCE PHASE.

A. Review the Application Package. Review the content of each submitted document for regulatory compliance. The documents to be reviewed include:

(1) A completed FAA Form 8310-3.

(2) Perceived need document. If the repair station is unable to establish the continuing need requirement, the FAA will renew the repair station certificate based on its previous continuing need statement. However, the FAA will advise the repair

station in writing that if the repair station is still unable to show a continuing need at the time of its next renewal, the FAA may not renew the certificate.

NOTE: It is not necessary for a renewal applicant to submit an activity report for each article for which it is rated. A single document indicating that minor or no changes were made to its customer list will satisfy the need requirements. The need can be verified during the inspection phase.

(3) The repair station's list of maintenance functions to be contracted to another entity, if changes have been made. (See part 145, § 145.217. For additional information, see Chapters 161 and 164.)

B. Repair Station Manual/Quality Control Manual or Section. If revisions are made to these manuals, they should be reviewed as they are submitted. In some cases, a repair station may elect to revise its manuals for its certificate renewal. Regardless of when they are submitted, the FAA must accept these revisions. The revision's inclusion should not delay the renewal process. The FAA may elect to review the revisions and accept or reject them after the certificate renewal has been completed based on the old manuals. Acceptance of the revision must be accomplished in accordance with Chapter 164, which requires the FAA to provide the repair station with a letter accepting the revision.

NOTE: Repair stations do not need to wait until the IFO accepts revisions to implement them. However, if the FAA finds a revision unacceptable, the repair station must have a procedure in place that describes how articles returned to service will be addressed.

C. Document any Deficiencies. Conduct a thorough and comprehensive review of all documents. If deficiencies are found in any document, return it to the applicant with a letter outlining the deficient areas. Inform the applicant that the certification process will not continue until all deficiencies are resolved. The applicant must provide the FAA with a written response that identifies the approximate date the errors will be corrected and the document resubmitted. The inspector's letter to the applicant must be as clear and complete as possible to avoid causing delays from documents being mailed back and forth without resolving issues.

D. Review Corrective Action Plan. Continue with the renewal process if the repair station provides a corrective action plan that satisfies the requirements of the inspection.

11. DEMONSTRATION AND INSPECTION PHASE.

A. Renewal Procedures. Follow the procedures identified in Section 2, paragraph 11 when performing a certificate renewal inspection.

NOTE: No fee deposit is required for renewal of a certificate. However, during the certification phase the inspector will confirm that the appropriate FAA fee has been paid in entirety in accordance with part 187 and AC 187-1, Flight Standards Service Schedule of Charges Outside the United States. (See paragraph 15B(1).)

B. Line Station Authorization Surveillance. A repair station quality control system audit is required to ensure compliance with its quality control procedures. Review the audits of line stations to ensure the repair station has visited each of its line stations once per year. The quality control audit should provide a report for each line station showing which station was audited, the date of the audit, what was audited, and findings and corrective action identified during the audit. Once a year, perform a physical inspection of a minimum 10 percent sampling of line stations to confirm the effectiveness of the repair station's quality control procedures.

NOTE: Line stations outside the geographic boundary of the country where the certificated facility is located will not receive a line station authorization. An authorization request for line stations outside these boundaries must follow the geographic authorization process. (See Section 4.)

C. Geographic Authorization Surveillance. A geographic authorization may be issued to a repair station located outside the United States to maintain U.S.-registered aircraft at a location outside the country where the repair station certificate is held. (See Chapter 161 for additional description and guidance on geographic authorization.)

(1) A repair station quality control system is required to audit its geographic authorization location annually to ensure compliance with the repair station

manual and quality control procedures. Review the audits to ensure compliance with the repair station's approved manuals.

(2) If the repair station's geographic authorizations are within the geographic boundaries of the certificate-holding district office, the ASI should perform an annual 10 percent sampling of the geographic authorization locations.

(3) Surveillance of a geographic authorization should also be coordinated with the U.S. Air Carrier Certificate Management Office to reduce the possibility of duplicate surveillance and increase the efficient use of resources.

D. Findings/Deficiencies. Due to the distance, travel, expense, and short time frame requirements associated with repair stations located outside the United States, apply the following policy regarding deficiencies/findings noted during the document review and inspection phases:

(1) If the FAA discovers deficiencies in an application for renewal or after conducting an inspection, the FAA may allow the applicant sufficient time after notification to correct the deficiencies or to submit a plan for corrective action (depending on the nature of the deficiencies). If the FAA finds the written plan for corrective action acceptable, it may renew the repair station certificate.

(2) If the applicant fails to correct the deficiencies within the specified time agreed to between it and the FAA, the FAA will terminate the application for renewal.

(3) If the part 145 repair station certificate expires during the time period between inspections or due to unusual circumstances, the FAA may extend the duration of the repair station certificate for a reasonable period of time. Provided that the applicant demonstrates an ability and willingness to correct the noted deficiencies, the FAA may extend the certificate for a period of up to 90 days.

(4) Depending on the nature of the deficiencies, the FAA may amend the repair station's ratings. In any of the above situations, after the FAA is satisfied with all corrective action, the certificate will be reissued using the original renewal date. No renewal time or advantage should be gained by allowing deficiencies to go uncorrected.

13. CERTIFICATION PHASE.

A. Prepare Certificates. When the applicant has met all regulatory requirements, the CPM will accomplish the following:

(1) Complete blocks 6-9 of FAA Form 8310-3 (the application form) to show:

(a) Any remark or discrepancy noted during inspection

(b) Findings and recommendations

(c) Date of inspection

(d) Office and signature of the CPM

(2) Prepare FAA Form 8000-4, Air Agency Certificate, which must be signed by the IFO manager.

NOTE: Air agency certificates and operations specifications are legal documents. The language should clearly specify the authorizations, ratings, and/or limitations being approved. When completed, these forms should have no erasures, strikeouts, or typographical errors.

B. Prepare Air Agency Certificates. The certificate will include the following information:

(1) After "Number," insert the certificate number assigned to the facility. This will be in accordance with the current air agency numbering system.

(2) Under "This certificate is issued to," insert the official name of applicant's business. This must be the same as shown on the application form.

(3) Under "whose business address is," insert the address/location of the applicant's business. This must be the same as shown on the application form.

(4) After "to operate an approved," insert the words "repair station."

(5) Under "with the following ratings," insert the ratings issued. The ratings must be listed by the general category, such as airframe, powerplant, radio, and so forth.

(6) If a repair station is issued a limited rating, then it must be listed as such on the certificate, e.g., limited radio.

(7) When ratings are added or amended, show the date of each issuance in parentheses, following the added or amended rating.

(8) After “shall continue in effect,” add “insert the new renewal date.” Refer to § 145.55. A renewal of a repair station located outside the United States should be issued for an initial certification period of 12 months. Thereafter, at the discretion of the IFO, the certificate may be renewed up to 24 months from the date of the last renewal, unless otherwise coordinated with the regional office.

NOTE: Although the regulation allows for a 24-month renewal period, current policy requires ASIs to perform annual surveillance of repair stations, including those facilities located outside the United States, which results in a renewal of the repair station certificate. This renewal ensures the repair station does not extend past the mandatory 24-month certificate period, which would require a new certification action—not a renewal.

(9) Under “Date issued,” insert the original issuance date of the certificate. This will be the date of original certification.

(10) Under “By direction of the Administrator,” insert the signature of the office manager and office identifier.

(11) This certificate is not transferable, and any major change in the basic facilities or in the location thereof must be immediately reported to the appropriate FAA regional office.

C. Prepare Operations Specifications.

(1) Following “The rating(s) set forth on Air Agency Certificate Number,” insert the air agency certificate number from the respective certificate.

(2) Following “is/are limited to the following,” insert, as applicable:

(a) The associated capabilities list (as described in Chapter 161).

(b) Limited ratings, to include makes, models, or parts.

(c) Limited rating for specialized services, including the specification used.

(d) Line Maintenance Authorization. (The repair station must meet the requirements of § 145.205(d).)

(e) Following “Delegated authorities,” insert “none.”

(f) Under “Date issued or revised,” insert the date the inspection was satisfactorily completed.

(g) Under “For the Administrator,” insert the signature block of the assigned inspector.

D. Prepare Certification Report. Ensure that a certification report is prepared properly. The report must include the name and title of each ASI on the certification team. The report is signed by the CPM and contains at least the following:

- FAA Form 8310-3, completed
- A letter of compliance (only if there are changes to the certificate/rating)
- A copy of the Air Agency Certificate issued
- A copy of the issued operations specifications
- A summary of all discrepancies encountered during the inspection

15. TASK OUTCOMES.

A. File PTRS Data Sheet.

B. Complete the Certification Task. Completion of the certification task will result in one of the following:

(1) Verify that the fees have been paid in full. The fee should be deposited in accordance with part 187 and with IFO procedures. FAA policy requires submitting an invoice to the repair station using an items list of fees charged when issuing the certificate. It is permissible to issue a renewal certificate pending receipt of the fee. Due to normal corporate accounting practices, it may take a few weeks before the fee is transmitted.

(a) If the fee is not received within a reasonable period of time, the IFO should advise the repair station in writing that certificate action may be required if the fee is not transmitted as soon as possible.

(b) The IFO should establish office policy regarding time frames and procedures for fee payments. The IFO is familiar with local mail and electronic transaction time frames.

(2) Issuance of a certificate and operations specifications.

(3) A letter to the applicant indicating that the certificate is denied (as applicable).

(4) A letter to the applicant confirming termination of the certification process (as applicable).

C. Distribute Certification Report. Distribute the completed report as follows:

(1) Retain the original certification report in the IFO.

(2) Forward one copy of the certificate to all involved district and regional offices.

(3) Send a letter to the NAA of the country where the repair station is located, advising it that the FAA certificate and operations specifications have been issued. The letter should also request that the NAA advise the IFO any time the NAA take certificate action or identifies serious concerns against that repair station.

D. Document Task. File all supporting paperwork in the certificate holder/applicant's office file and update the VIS.

17. FUTURE ACTIVITIES. The IFO must ensure an orderly transition from the certification process to certificate management. Perform follow-up inspections and surveillance inspections, as required.

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SECTION 4. CERTIFICATE AMENDMENT PROCEDURES AND GEOGRAPHIC AUTHORIZATIONS

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites:

- Knowledge of the regulatory requirements of 14 CFR part 145 and completion of the repair station course
- Successful completion of the General/Air Carrier Airworthiness Safety Inspectors Indoctrination course, or equivalent
- Previous experience with certification or surveillance of part 145 repair stations

B. Coordination. This task requires coordination between the ASIs (Airworthiness and Avionics). Additionally, multi-regional coordination may be required.

3. PREAPPLICATION PHASE: ADDING AN ADDITIONAL RATING. The ASI should follow the initial certification procedures in Section 2, paragraph 5.

A. PASI. A PASI is not required for a change or amendment to a certificate.

(1) An application meeting is not required for amending a repair station certificate.

(2) The repair station must submit a completed application Form 8310-3.

(3) The repair station must submit a revised letter of compliance that covers the additional ratings.

B. Change to Facility or Address Change.

(1) The repair station must submit a new application when a change to the facility affects the repair station certificate (e.g., adding additional space or reducing the size of the facility).

(2) The repair station must submit a new application prior to moving to a new facility/changing its address. The FAA will review the application and may authorize continued work while the applicant moves to another facility.

C. Change in Ownership. When a repair station sells or transfers ownership of its organization, the new owner must submit a new application.

(1) If the sale or transfer of ownership (normally referred to as a financial takeover) does not affect the employees, facilities, equipment, or daily operation of the repair station, only a new application is required.

(2) An applicant is required to submit a new application and manuals for an ownership change that affects the repair station's daily operation (e.g., management change, facility and equipment change, etc.). The application process should be handled in the same manner as a new application (see Section 2 for initial certification procedures). However, applicants may continue to operate under the old certificate while being processed for new certification unless the ASI and the regional office determine a safety concern prohibits the continued operation.

5. GEOGRAPHIC AUTHORIZATION.

A. Criteria for Issuing Geographic Authorization. (Geographic authorization is different from work away from the station or line station maintenance authorization.) The repair station must fulfill the following criteria. Ensure that:

(1) The repair station has an airframe rating for a complete aircraft, i.e., Boeing 757, Airbus 320, and so forth.

(2) The make/model aircraft is operating into the requested location. The aircraft being operated into the requested location need not be the aircraft with the part 129 authorization.

(3) The FAA will not issue a geographic authorization at a location where an appropriately-rated repair station already exists, unless the U.S. operator shows why the additional geographic authorization is necessary. For example, legitimate reasons for issuing the rating may be that locally rated repair stations cannot meet the operators' schedule or are unable to deal with an additional workload.

(4) Each geographic authorization is included in the repair station's internal self-evaluation program. The program must include an annual evaluation and report of each geographic authorization location. This report must be made available to the FAA on request.

NOTE: Geographic authorization may not be issued to a location within the United States

and its territories. The FAA has determined that ample certificated repair stations are located within the United States to provide service. The intent of a geographic authorization is to provide U.S. operators and foreign operators that hold a § 129.14 authorization the ability to meet the requirements of their maintenance program in locations where appropriately rated FAA-certificated repair stations are not available.

B. Geographic Authorization Procedures. The IFO will:

(1) Receive notice of the air carrier's need. The process starts when the air carrier notifies its certificate-holding district office that it needs the services of a repair station at a location where a geographic authorization is required for the repair station.

NOTE: An operator under § 129.14 will use the IFO office that issued the § 129.14 authorization.

(2) Receive a letter from the repair station requesting geographic authorization. The letter should explain how the repair station will meet the criteria set forth in paragraph 5A, and include a copy of the repair station manual procedures section that addresses geographic authorizations and responsibilities.

(3) When eligibility for geographic authorization is established, coordinate closely with the air carrier Certificate-Holding District Office (CHDO) to ensure that duplicate efforts do not occur.

NOTE: Certification and surveillance of geographic authorization is the responsibility of the IFO. However, this does not relieve the CHDO of its responsibilities for surveillance of the air carrier's responsibilities to meet § 121.369. The CHDO's coordination with IFOs located outside the United States is an efficient method of surveillance of air carrier operations in areas that would normally require the CHDO to use resources that may be better used in other areas. Geographic authorization is limited to line maintenance type operations.

(4) Receive a copy of the contract from the air carrier CHDO.

(5) Provide the CHDO with a copy of the repair station's commitment to meet paragraph 5A criteria.

(6) Receive a copy of the repair stations' self-evaluation report, if applicable. If this is an initial or an added geographic authorization location, the repair station must provide the FAA with a copy of its self-evaluation report, which states its ability to function at the requested location.

(7) Review the self-evaluation report to ensure that the repair station has trained personnel, tooling, equipment, manuals, and inspection processes to support the requested geographic authorization.

(8) Revise the repair station operations specifications to include the initial or new geographic authorization location. The operations specifications must list each authorization by location address, make, and model of aircraft. Additionally, list the air carrier customer name and the section of its appropriate air carrier manual that will be used in performing maintenance.

(9) On an initial geographic authorization, revise the repair station certificate to list the geographic authorization directly below the airframe rating.

(10) Forward the revised certificate and operations specifications to the repair station and send a copy to the CHDO.

NOTE: Do not delay in sending a copy of the revised certificate and OpSpecs to the repair station. Delays may adversely affect the ability of air carriers to meet their operational schedules.

C. Surveillance Requirement for Geographic Authorization.

(1) It is not necessary for the IFO or the CHDO to conduct an on-site surveillance for a request to add a new location. (An additional location may be added without further showing.)

(2) When conducting repair station certificate renewal or off year surveillance, the ASI must review the repair station's geographic authorization self-evaluation reports to ensure that each location has been evaluated within the previous year.

(3) The IFO must establish an office policy to require inspectors that are performing surveillance in a city or country where a repair station has a geographic

authorization to visit those locations, provided the visit does not require additional travel within the country or cause extended travel resources. This means the inspector must be able to travel to the locations using ground transportation and must be able to complete the visit within their normal workday unless otherwise authorized by their supervisor.

(4) Forward an explanation of the fees, which include all times and costs associated with surveillance of visiting a geographic authorization, to the repair station's ASI for inclusion in the repair station certificate's renewal cost.

(5) A CHDO may not charge the repair station for any surveillance of geographic authorization it performs as part of its air carrier surveillance.

(6) Close coordination must occur between the CHDO, the IFO where the geographic authorization is located, and the certificate holder's IFO to reduce the possibility of multiple surveillance activities. All findings associated with a geographic authorization must be coordinated between all offices involved with the geographic location.

(7) The IFO that retains the repair station certificate is responsible for enforcement activity. It must communicate findings with the air carrier CHDO. Any additional enforcement action relating to the air carrier is the responsibility of the CHDO.

D. Transition.

(1) Transition of a repair station from the current part 145 rule to the one effective on October 3, 2003 should take place upon the next certificate renewal after October 3, 2003.

(2) During the renewal process, each airframe-rated repair station ASI must review the criteria listed

above in paragraph 5A to ensure that each previously issued geographic authorization meets these requirements.

7. APPLICATION PHASE. Added ratings or change to the certificate will be the same process as renewal of a certificate discussed in Section 3.

9. DOCUMENT COMPLIANCE PHASE.

A. Follow the same renewal process discussed in Section 3.

B. Ensure that any manual revision required by the application for an added rating or change to the certificate is reviewed for compliance with part 145. Manual revisions and documentation findings should be dealt with as discussed in Section 3.

11. DEMONSTRATION AND INSPECTION PHASE. This phase should follow the same requirements as discussed in Section 3, as appropriate to the requested change to the repair station certificate and operations specifications.

13. ISSUE OF AMENDED CERTIFICATE AND OPERATIONS SPECIFICATIONS. Amendments to a repair station certificate and operations specifications must be accomplished as discussed in Section 3 and must reflect the applicant's requested change.

15. TASK OUTCOMES. These are the same as discussed in Section 3.

17. FUTURE ACTIVITIES. The IFO must ensure that an orderly transition occurs from the certification process to certificate management. Perform follow-up inspection and surveillance inspections, as required.

CHAPTER 164. EVALUATE A PART 145 REPAIR STATION AND QUALITY CONTROL MANUAL OR REVISION

SECTION 1. BACKGROUND

1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

A. Maintenance: 3230/3371/3372

B. Avionics: 5230/5371/5372

3. OBJECTIVE. This chapter provides guidance for evaluating, accepting, or rejecting all Title 14 of the Code of Federal Regulations (14 CFR) part 145 repair station and/or quality control manual original submissions or revisions.

5. GENERAL.

A. Before issuing an Air Agency certificate, the applicant's repair station and/or quality control manual must reflect the applicant's current procedures and be acceptable to the Federal Aviation Administration (FAA).

NOTE: If the training program required by part 145 § 145.163 is included in either of these manuals, that portion must be FAA-approved. The training program requirement is not effective until April 6, 2005.

B. When a certificate holder revises an existing manual, the FAA must also accept the revisions.

C. The manuals submitted by a certificate holder or applicant may be separate or may be combined into a single manual. The format should be consistent and all regulatory requirements must be included. The aviation safety inspector (ASI) must ensure the procedures used in the performance of maintenance, preventive maintenance, or alterations are reflected accurately in the manuals. It is expected that, to fully describe the repair station's inspection/quality system, there will be some procedures that may not be regulatory.

D. When evaluating a manual as part of an original certification, each entire manual will be submitted prior to certification. If this task is performed as a revision, only the portion of the manual that is revised must be submitted.

E. Each certificated repair station must maintain a current repair station and quality control manual.

F. A certificated repair station's current repair station/quality control manual must be accessible for use by repair station personnel. All repair station employees on all shifts must have access to the manual, regardless of the media used (electronic, CD-ROM, etc.).

G. A certificated repair station must provide to its certificate-holding district office (CHDO) the current repair station/quality control manual in a format acceptable to the FAA. If the manual or manuals submitted are in electronic media format, they must be compatible with FAA electronic capabilities and free of any programs that would adversely affect that capability.

H. There are some recommendations included in this handbook referenced from Advisory Circular (AC) 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals, that are not required by the regulations. They have been included to assist the inspector and certificate holder/applicant in developing a more complete description of the repair station's overall functions, responsibilities, and quality control procedures.

I. For certificate holders under parts 121, 125, and 135, and for foreign air carriers or foreign persons operating a U.S.-registered aircraft in common carriage under part 129, maintenance, preventive maintenance, and alterations must be performed in accordance with applicable sections of that air carrier's manuals.

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SECTION 2. PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites:

- Knowledge of the regulatory requirements of 14 CFR part 145
- Successful completion of Airworthiness Inspector's Indoctrination Course for General Aviation and Air Carrier Inspections
- Successful completion of the Airworthiness Inspection/Surveillance of Foreign/Domestic Repair Stations Course and the on-the-job training (OJT) program related to part 145

B. *Coordination.* This task may require coordination with other specialties, regions, or district offices.

3. REFERENCES, FORMS, AND JOB AIDS.

A. References:

- 14 CFR parts 1, 39, 43, 65, 91, 121, 125, 129, 135, 145, and SFAR 36
- AC 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals
- Order 8300.10, Airworthiness Inspector's Handbook, Vol. 2, Chapters 162, 163, and 165

B. *Forms.* None.

C. *Job Aids.* None.

5. REPAIR STATION MANUAL PROCEDURES.

A. Receive the certificate holder or applicant's manual or revision as required by §§ 145.51, 145.207, and 145.211(c).

B. Review the submitted manual or revision to ensure that it meets the regulatory requirements of §§ 145.209 and 145.211. The manual or revision must include the following:

(1) An organizational chart that identifies:

- (a) Each management position with authority to act on behalf of the repair station.
 - The organizational chart required by § 145.209 may identify management positions by title only.

- Management includes, but is not limited to, the executive functions of planning, organizing, coordinating, directing, controlling, and supervising.
- This does not eliminate the requirement in § 145.51 for an applicant to submit the names and titles of its management and supervisory personnel at the time of application.

(b) The area of responsibility assigned to each management position, which is the area(s) in the repair station that the manager is directly accountable for and maintains decision authority over.

(c) The duties, responsibilities, and authority of each management position.

(2) Procedures for maintaining and revising the rosters required by § 145.161.

NOTE: Within five business days of the revision, the rosters required by this section must reflect changes caused by termination, reassignment, change in duties, scope of assignment, or addition of personnel.

(3) A description of a repair station's operations describing how the maintenance is to be performed, where it would start, and how it progresses through the entire repair cycle for approval for return to service. Also include:

(a) A description of the housing may include dimensions, construction method, heating and ventilation systems, lighting, door openings, and physical address.

(b) A description of the facilities that describes how the shop, hangar, or other work areas are laid out.

(c) A description of the equipment, tooling, and materials used to perform maintenance.

NOTE: The "description of materials used to perform maintenance" should not be a physical description of the material, but rather an explanation of the repair station's handling and storage of the materials. If materials require specific environmental controls or cannot be stored next to certain chemicals or solvents, these should be identified. For

example, it would not be acceptable to store oxygen equipment near petroleum products.

- If the repair station does not own the equipment, procedures must be included in the manual that describe how the equipment will be obtained (lease, rentals, etc.). The manual must also include where the equipment will be used, how personnel will be trained to use the equipment, and how the repair station will ensure calibration issues, if any, are addressed after transporting the equipment.
- If the repair station chooses to use equipment, tools, or materials other than those recommended by the manufacturer, the manual must include a procedure used by the repair station to determine the equivalency of that equipment, tool, or material.

NOTE: When the repair station is adding a rating, or an applicant has applied for certification, all required equipment for the rating it seeks must be in place for inspection by the FAA. This provides the ASI with the opportunity to evaluate its placement and use and to verify that repair station personnel are trained to operate it.

(4) Capability list procedures used to:

(a) Revise the capability list provided in § 145.215 and notify the CHDO of revisions to the list, including how often the CHDO will be notified of revisions; and

(b) Develop and perform the self-evaluation required by § 145.215(c) for revising the capability list, including the methods and frequency of such evaluations and procedures for reporting the results to the appropriate manager for review and action.

(5) Procedures for revising the training program and submitting revisions to the CHDO for approval, which should include:

(a) The title of the person authorized to make a training program revision.

(b) The method of submitting a revision (electronic, hard copy, disk, etc.).

(c) A procedure for recording a revision and a method of identifying the revised material or text.

NOTE: The training program does not go into effect until April 6, 2005. Manuals without the training program included must be accepted until guidance is issued and a revision to this chapter is completed.

(6) Procedures for accomplishing work performed at a location other than the repair station's fixed location, which should contain the following:

(a) Title of the person responsible for determining the location is appropriate for the work to be performed.

(b) Title of the person responsible for initiating such work and assigning the personnel necessary to perform inspections and supervise the work.

(c) Procedures for communication between responsible repair station personnel at the fixed location and the maintenance personnel working away from the station. This should include the transfer of parts, supplies, tools/equipment, technical data, and trained personnel.

(d) Procedures that will be used away from the repair station if they deviate from established procedures used at the fixed location. The repair station must ensure that all work performed while exercising the privileges of its certificate are accomplished per the appropriate maintenance manual and its repair station or quality control manual. The determination for performing work at another location must meet the following requirements:

- The work is necessary due to a special circumstance, such as a one-time occurrence, as determined by the FAA; or
- It is necessary to perform such work on a recurring, but not continuous, basis and the repair station's manual includes the procedures for accomplishing maintenance, preventive maintenance, alterations, or specialized services at a place other than the repair station's fixed location.

NOTE: The FAA determination must be made prior to the performance of any maintenance, preventive maintenance, or alterations away from the repair station's fixed location unless an FAA-accepted procedure is included in the manual.

(7) Procedures for performing maintenance, preventive maintenance, and alterations for certificate holders under parts 121, 125, and 135 and for foreign air carriers or foreign persons operating a U.S.-registered aircraft in common carriage under part 129.

(a) The FAA requires that maintenance under a continuous airworthiness maintenance program be performed in accordance with the operator's manual. It is the operator's responsibility to ensure the work performed on its behalf is done in accordance with the approved maintenance program.

(b) The certificated repair station that performs maintenance, preventive maintenance, or alterations for an air carrier or commercial operator that has a continuous airworthiness maintenance program under part 121 or part 135 must follow the air carrier or commercial operator's maintenance program or applicable sections of its maintenance manual.

(c) A certificated repair station that performs inspections for a certificate holder conducting operations under part 125 must follow the operator's FAA-approved inspection program.

(d) A certificated repair station that performs maintenance, preventive maintenance, or alterations for a foreign air carrier or foreign person operating a U.S.-registered aircraft under part 129 must follow the operator's FAA-approved maintenance program.

(e) The FAA may authorize a certificated repair station to perform line maintenance on any aircraft of an air carrier certificated under parts 121 or 135, or of a foreign air carrier or foreign person operating a U.S.-registered aircraft in common carriage under part 129, provided the certificated repair station:

- Has the appropriate ratings to perform the maintenance or preventive maintenance on transport-category aircraft;
- Performs such line maintenance in accordance with the operator's manual and approved maintenance program;
- Has the necessary equipment, trained personnel, and technical data to perform such line maintenance; and
- Operations Specifications include an authorization to perform line maintenance.

NOTE: A repair station must be appropriately rated to perform line maintenance for an air carrier. This would normally require an airframe rating to accomplish scheduled checks, daily inspections, or servicing of articles. However, a repair station with the appropriate ratings may accomplish unscheduled maintenance and repairs. This could include avionics facilities limited to avionics functions such as troubleshooting electrical or electronic systems or replacing defective electronic articles.

(8) Procedures for maintaining and revising the contract maintenance information, including the submission of revisions to the CHDO for approval and how often the FAA will be notified of revisions.

(a) The FAA must approve the maintenance functions contracted to outside facilities.

(b) The repair station must maintain a list of each facility that it contracts maintenance functions with, including the type of certificate and ratings, if any, held by each facility.

(c) The maintenance function list need not be included in the manual, but the manual should include the location or office where the list is maintained.

NOTE: Maintenance functions are a step or series of steps in the process of performing maintenance, preventive maintenance, or alterations which result in approving an article for return to service. It is not the intent of this rule to create "virtual repair stations" that provides only an approval for return to service. ASIs must evaluate the amount of work a repair station desires to contract out versus the work that is performed in-house.

(9) A description of the recordkeeping system used by the repair station to obtain, store, and retrieve the records required by part 43. These records must be in English.

(10) Procedures for revising the repair station's manual and notifying its CHDO of revisions to the manual, including how often the FAA will be notified of revisions. The procedure must include:

(a) The title of the person authorized to make a revision.

(b) The method of submitting a revision (electronic, hard copy, disk, etc.).

(c) A procedure for recording a revision and a method of identifying the revised material or text.

(d) A description of the system used to identify and control sections of the repair station manual.

(11) Procedures for submitting malfunction or defect reports in a format acceptable to the FAA, and for notifying the CHDO. If the repair station performs maintenance, preventive maintenance, or alterations for an air carrier, the manual must describe how it will notify the operator.

(12) Procedures for detecting and reporting suspected unapproved parts.

7. QUALITY CONTROL MANUAL PROCEDURES.

NOTE: The quality control manual may be separate from the repair station manual or be combined with that manual as a separate section or volume.

A. A certificated repair station must prepare and keep current a quality control manual in a format acceptable to the FAA. Depending upon the size, complexity, and rating(s) of the repair station, that manual should include a description of the system and procedures used for:

(1) Receiving and documenting articles, standard parts, and raw materials.

(2) Performing incoming inspections of raw materials and standard parts that check for:

- Proper documentation, identification, and traceability
- Conformity to a specification and acceptable quality
- Shelf life
- Contamination
- Shipping damage
- State of preservation

(3) Performing preliminary inspection of all articles that are maintained or altered to check for:

- Proper identification, documentation and traceability
- Shipping damage and contamination
- State of preservation
- Life limits

- Airworthiness directives and service bulletins
- Functional test or tear down inspections
- FAA approval of new articles
- Determination of what repairs are necessary

(4) Inspecting all articles that have been involved in an accident for hidden damage before maintenance, preventive maintenance, or alteration is performed. Ensure that items are disassembled as necessary and inspected for hidden damage in adjacent areas.

(5) Performing in-progress inspections to ensure inspections, testing, and/or calibration is conducted at various stages while the work is in progress.

(6) Performing final inspections and approvals for return to service.

- Ensures the inspection, testing, and/or calibration of articles, including documentation, is accomplished at the completion of maintenance or alteration.
- The manual must include a procedure for approval for return to service.

(7) Ensuring continuity of inspection responsibility.

- Include procedures for ensuring that the responsibilities of any inspector are properly performed in their absence.
- If the repair station has multiple shifts, include procedures to ensure the continuing responsibility for maintenance in progress through the use of a status book, shift turnover log, or similar documents.

(8) Calibrating measuring and test equipment used in maintaining articles, including the intervals at which the equipment will be calibrated.

(9) Taking corrective action on deficiencies related to repair station operation.

(a) Part 145, § 145.211(c)(1)(ix) states that the quality control manual must include procedures used for taking corrective action on deficiencies. A

corrective action is taken to remedy an undesirable situation. The correction of deficiencies is normally an integral part of a repair station's improvement process, and could include revisions to procedures that were not working properly (reference AC 145-9, paragraph 4-13 for additional guidance).

NOTE: The repair station is not required at this time to have an internal evaluation program, quality assurance program, or a continuous improvement program.

(b) Corrective action requires that a fact-based investigation determine the root cause or causes to eliminate them. Corrective action would be applicable in two situations: Before the article is approved for return for service and after the article has been approved for return to service.

(c) If a deficiency is found before the article is approved for return to service, the repair station should follow its procedures describing how rework will be accomplished. If the deficiency is noted after the article is approved for return to service, the repair station should follow its procedures to notify the CHDO and the owner/operator of any potential problems and recall any unairworthy product. The objective of the investigation into the cause of the deficiency and the corrective actions taken is to prevent a recurrence of the same or similar problems.

(d) The procedures in the quality control manual should include a system for documenting any deficiencies and the corrective actions taken to prevent a recurrence. The system should let employees track any open corrective action requests and the date the corrective action is due. The program should also be tracked to include audits of the corrective action(s) taken to ensure it was effective. These audits should also be tracked to ensure that they are completed in a timely fashion.

(10) Establishing and maintaining proficiency of inspection personnel.

(a) The procedure should ensure that inspection personnel are familiar with the applicable regulations and are proficient at inspecting the articles they are assigned to inspect.

(b) Testing, formal training, recurrent training, or a combination of these methods could be used to maintain the proficiency of inspection personnel.

(11) Establishing and maintaining current technical data for maintaining articles.

(12) Revising the repair station's quality manual and notifying its CHDO of revisions to the manual, including how often the FAA will be notified of revisions. The procedure must include:

(a) The title of the person authorized to make a revision.

(b) The method of submitting revisions (electronic, hard copy, disk, etc.).

(c) A procedure for recording revisions and a system for identifying revised material or text.

(13) Qualifying and surveying non-certificated persons who perform maintenance, preventive maintenance, or alterations for the repair station. A certificated repair station may contract a maintenance function pertaining to an article to a non-certificated person, provided that:

(a) The non-certificated person follows a quality control system equivalent to the system followed by the certificated repair station;

(b) The certificated repair station remains directly in charge of the work performed by the non-certificated person;

(c) The certificated repair station verifies, by testing and/or inspecting, that the work has been performed satisfactorily and that the article is airworthy before approving it for return to service; and

(d) The non-certificated person's contract allows the FAA to inspect or observe work being performed on any articles for the certificated repair station.

NOTE: The ability to inspect a non-certificated person can only be accomplished while the contract is in force. This requirement does not give ASIs access to non-FAA-certificated facilities if there is no work being performed under contract for a certificated repair station.

B. Where applicable, the manual should contain references to the instructions for continued airworthiness, maintenance manuals, inspection standards, or other approved or accepted data specific to the article being maintained.

C. A sample of each of the inspection and maintenance forms used in the performance of

maintenance and the instructions for completing those forms.

NOTE: These forms may be addressed in a separate accepted manual that is submitted to the CHDO and maintained in current condition by the repair station.

9. TASK OUTCOMES.

A. File PTRS Data Sheet.

B. Completion of this task will result in the following actions:

(1) Accepting the repair station and/or quality control manuals by sending the certificate holder a letter indicating the date; document, manual, or revision number; and an acceptance statement. The principal inspector should sign the letter.

NOTE: Federal agencies can no longer refuse electronic versions of manuals, forms, record systems, etc. Federal law prohibits agencies from making the use of electronic media more difficult or from requiring additional steps or procedures for users of electronic media. Therefore, all repair station document submissions must be accompanied by a cover letter that describes the submission and is signed by the appropriate manager. ASIs will accept or approve submissions with a cover letter indicating the date; document, manual, or revision number; and an acceptance or approval statement. Additionally, ASIs will reject a certificate holder's submission using a cover letter that indicates the date; document, manual, or revision number; and includes a detailed explanation of the discrepancies or non-conformances noted. The acceptance or approval letter should remain with the manual or be kept on file.

(2) Approving the training program, manual, or a revision to either document by sending the certificate holder a letter indicating the date; document, manual,

or revision number; and an acceptance statement. The principal inspector should sign the letter.

NOTE: A certificate holder using electronic media such as CD-ROM disks, LAN-based manual systems, or internet-based manual systems may scan the cover letters and insert them electronically into the applicable document if they do not wish to maintain a file of acceptance or approval letters.

C. Once the applicant/certificate holder receives the acceptance of the repair station and/or quality control manuals, or the approval of the training program and/or manual, copies of the manuals or disks must be provided to the CHDO. The principal inspector will file a copy in the certificate holder/applicant's office file along with a copy of the acceptance letter.

(1) If a paper revision, the ASI will remove the affected pages and insert the revised pages in the manuals or the training program. The ASI will update the manual control system and file the cover letters in the appropriate office file.

(2) If in electronic format, the ASI will replace the outdated disk with the current or initial manual or training submission. The ASI will place a copy of the acceptance letter in the certificate holder's office file.

D. Rejecting the manual(s) or revisions by doing the following:

(1) Initiate a cover letter indicating the date and document, manual, or revision number of the document or manual being rejected.

(2) Return all copies to the applicant with an explanation of discrepancies that must be corrected and instructions for resubmitting the documents in order to proceed with the certification or revision process.

E. *Document Task.* File all supporting paperwork in the certificate holder/applicant's office file.

11. FUTURE ACTIVITIES. None.

CHAPTER 165. EVALUATE PART 145 REPAIR STATION FACILITIES AND EQUIPMENT

SECTION 1. BACKGROUND

1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

A. Maintenance: 3378.

B. Avionics: 5378.

3. OBJECTIVE. This chapter provides evaluation and inspection guidance for a Title 14 of the Code of Federal Regulations (14 CFR) part 145 repair station for original certification, change in rating, change in location, or adding facilities.

5. GENERAL.

A. When determining the suitability of permanent housing or other facilities utilized for the maintenance of an aeronautical article, the inspector should consider climatic conditions. This is to determine if high or low temperatures, excessive dust or sand, or other conditions will adversely affect worker efficiency. The inspector should also consider the maintenance being performed to determine if work processes are adversely affected by environmental conditions.

B. Applicants for a repair station certificate, amendment to, transfer of, or an additional rating must be made in a format acceptable to the Federal Aviation Administration (FAA) and conform to the requirements of part 145. Additional guidance for the certification and operation of a part 145 repair station may be found in separate FAA Order 8300.10 chapters as well as the current version of Advisory Circular (AC) 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals.

7. SATELLITE REPAIR STATION INSPECTION.

A. A certificated repair station may apply for additional facilities or locations to become satellites of the repair station with managerial control. If practical, the satellite repair station may use all or portions of the managerial repair station's manuals to develop its own manuals. Each satellite must satisfy all requirements of part 145 for each rating sought. Ratings for the satellite

may not exceed the rating of the managerial repair station.

NOTE: The FAA certificate-holding district office (CHDO) for the repair station with managerial control will also be the holder of the satellite repair station's certificate. Surveillance will be conducted by the geographic flight standards district office (FSDO) at the request of the CHDO.

(1) Personnel and equipment from the repair station with managerial control and each certificated satellite repair station under its control may be shared.

NOTE: Procedures must be included in the manual to describe how tools will be recalibrated or removed from service if calibration is compromised during their transport between facilities.

(2) Inspection personnel must be designated for each satellite repair station and be available at the repair station anytime a determination of airworthiness or return to service is made. In other circumstances, inspection personnel may be away from the premises but must be available by telephone, radio, or other electronic means.

(3) The satellite repair station may not hold a rating that is not held by the certificated repair station with managerial control.

(4) The satellite repair station must be located in the domicile country as the certificated repair station with managerial control.

B. A satellite facility inspection is conducted in the same manner as a repair station facility inspection.

9. REPAIR STATION INSPECTION.

NOTE: The following procedures apply to all repair stations regardless of their geographic location.

A. Each certificated repair station must provide the following:

(1) Housing for the facilities, equipment, materials, and personnel consistent with its ratings.

(2) Facilities for properly performing the maintenance, preventative maintenance, or alterations of articles or the specialized services for which it is rated. Facilities must include the following:

(a) Sufficient work space and areas for the proper segregation and protection of articles during all maintenance, preventative maintenance, or alterations;

(b) Segregated work areas enabling environmentally hazardous or sensitive operations such as painting, cleaning, welding, avionics work, electronic work, and machining to be done properly and in a manner that does not adversely affect other maintenance or alteration articles or alterations;

(c) Suitable racks, hoists, trays, stands, and other segregation means for the storage and protection of all articles undergoing maintenance, preventative maintenance, or alteration;

(d) Space sufficient to segregate articles and materials stocked for installation from those articles undergoing maintenance, preventative maintenance, or alteration; and

(e) Ventilation, lighting, and control of temperature, humidity, and other climatic conditions sufficient to ensure personnel perform maintenance, preventative maintenance, or alterations to the standards required by this part.

B. A certificated repair station with an airframe rating must provide suitable permanent housing to enclose the largest type and model of aircraft listed on its operations specifications (OpSpecs).

NOTE: Each certificated repair station must have a fixed location where materials, equipment, tools, and data are stored. While consideration can be given for certain operating situations, aviation safety inspectors (ASI) must not authorize “virtual” or completely “mobile” repair stations. Even though the majority of the work is done away from the fixed location, each repair station must have a permanent, fixed base from which they operate the repair station.

(1) ASIs should evaluate the housing needs of the repair station based upon the depth and complexity

of the work the repair station will perform. For example, if an airframe-rated repair station will only be doing interior refurbishment or interior electrical work that does not require the aircraft to be completely housed, a nose dock or other similar housing may suffice for the housing requirement. Any work done on removed aircraft components must be accomplished in an appropriate housing, back shop, or other permanent structure.

(2) Repair stations that work away from their fixed location frequently must ensure another certificate holder’s housing and facilities are adequate and meet the requirements of the regulations for the ratings that they hold. A procedure should be included in their manual that describes how they will evaluate a certificate holder’s facilities prior to performing maintenance under the privileges of their certificate at the facility.

(3) Some repair stations, such as internal fuel tank repair stations, do not require housing that encloses the largest aircraft listed on their OpSpecs. Most of this type of work is performed in the aircraft wing and protection from the elements should not be a major consideration. The use of mobile coverings to protect articles being installed or removed from the wing should provide sufficient protection from the elements.

C. A certificated repair station may perform those maintenance functions for which it is rated on articles outside of its housing if it provides suitable facilities that are acceptable to the FAA. The facility must meet the requirements of 14 CFR § 145.103(a), and the work can be done in accordance with the requirements of part 43 of this chapter.

D. A certificated repair station may perform maintenance, preventative maintenance, or alterations for the following certificated operators or carriers:

(1) A 14 CFR part 121 or part 135 air carrier or commercial operator that has a continuous airworthiness maintenance program and the repair station must follow their program and applicable sections of their maintenance manual.

(2) A 14 CFR part 125 operator and the repair station must follow the operators FAA-approved inspection program.

(3) A foreign air carrier or foreign person operating a U.S.-registered aircraft and the repair

station must follow the operator's FAA-approved maintenance/inspection program.

E. A certificated repair station may be authorized to perform line maintenance for an air carrier certificated under 14 CFR part 121 or part 135, a foreign air carrier, or a foreign person operating a U.S.-registered aircraft in common carriage under 14 CFR part 129 provided:

(1) The repair station performs such line maintenance in accordance with the operators manual and approved maintenance program;

(2) The repair station has the necessary equipment, trained personnel, and technical data to perform such line maintenance; and

(3) The repair station OpSpecs include an authorization to perform line maintenance.

NOTE: A repair station authorized to perform line maintenance need not have the housing and facilities required by 14 CFR § 145.103(b). However, the repair station must meet all the requirements of part 145.

NOTE: This authorization is available to existing repair stations that request to perform maintenance, preventative maintenance, or alterations for an air carrier that meets the requirements of part 145. It is not a rating and therefore cannot be the only function the repair station performs. Applicants for a repair station certificate may apply for this authorization at the same time it makes application for a rating, but it cannot be the only function it is applying for. The repair station must hold the rating necessary to perform the line maintenance for the air carrier. For example, an avionics-rated repair station could not perform aircraft inspections or repairs to the airframe, powerplant, or propellers because these functions are outside the scope of its ratings.

F. A repair station may have the need to perform maintenance away from its permanent fixed base of operation. This requirement may be necessary due to a special circumstance, as determined by the FAA or may be recurring based on a repair station's need. Such work may include, but not be limited to:

- Aircraft recovery

- Biennial testing of systems on aircraft operating under IFR
- Fuel cell maintenance
- NDT inspections
- Interior modifications

(1) A repair station performing maintenance away from its fixed location may transport the materials, equipment, and technical personnel to the aircraft location or facility to facilitate the required maintenance.

(2) At no time while performing work away from their fixed base will the work scope exceed the capabilities for which the repair station is rated.

(3) A repair station that performs maintenance functions away from its fixed location on a recurring basis, must ensure the temporary facility(ies) they utilize meets the requirements of 14 CFR § 145.103(a).

(4) The repair station must ensure that its repair station manual includes the procedures for accomplishing maintenance, preventative maintenance, alterations, or specialized services at a place other than the repair station's fixed location.

G. Multiple Fixed Locations—Additional Facilities/Localized Within a Defined Area.

(1) A repair station does not require a geographic authorization or satellite certificate if it is seeking to work at another site within a localized area. A localized area may be defined as several buildings or hangars, which may be on or near an airport or at or near the primary fixed base address as stated on the repair station OpSpecs. Repair stations using multiple fixed locations under a single air agency certificate need not have all the tools, equipment, data, or personnel at each location. The repair station's primary fixed base and any additional fixed locations are considered a single repair station. Each facility address must be listed in the repair station OpSpecs. This situation is not considered work away from the station.

(2) The repair station manual must incorporate procedures that reflect how the repair station will meet the requirements of part 145 at each of its facilities. The procedures must include any supplemental operations (i.e., movement of articles, equipment, or tools required to perform the work) that may affect the repair station's ability to ensure the airworthiness of the articles maintained by the repair station. The repair

station remains directly in charge of the work performed at all fixed locations.

(3) All fixed location addresses must be listed on the repair station's OpSpecs. The repair station must submit a written request/application to use additional locations prior to exercising the privileges of its certificate and ratings at the additional fixed locations. The FAA must inspect and approve each location and update the OpSpecs with the address for each additional location.

(4) There also may be instances where an engine test cell facility is located away from the primary facility but operates under the same certificate as the primary facility. This may occur when:

(a) The FAA determines that the separate locations do not have any significant impact on the maintenance performed, and the separate locations are under the full control of the primary facility; and

(b) The separate facility must be in a defined area relative to the primary facility, and located within the same country. An FAA inspector must be able to use ground transportation to get from one facility to another without major expense or inconvenience.

(5) Paragraph A001(a) of the OpSpecs must contain the address of all of the repair station's fixed location(s).

SECTION 2. PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites:

- Knowledge of the regulatory requirements of 14 CFR part 145
- Successful completion of Airworthiness Inspector's Indoctrination Course for General Aviation and Air Carrier Inspections
- Successful completion of the Airworthiness Inspection/Surveillance of Foreign/Domestic Repair Stations Course and the on-the-job training (OJT) program related to part 145

B. *Coordination.* This task may require coordination with another specialty or district office, and the certificated repair station.

3. REFERENCES, FORMS, AND JOB AIDS.

A. References:

- 14 CFR parts 43, 65, 91, 121, 125, and 135
- AC 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals
- Order 8300.10, Vol. 2, chaps. 161, 162, 163, and 164
- HBAW 00-20A, Equivalency of Special Equipment or Test Apparatus as Provided by Parts 43 and 145

B. Forms:

- FAA Form 8310-3, Application for Repair Station Certificate and/or Rating

C. Job Aids. None.

5. PROCEDURES.

A. Review the Repair Station Certificate, OpSpecs for accuracy to determine that ratings are appropriate for work being performed, Manuals/Revision, and Capabilities Listing for accuracy. Also determine if maintenance functions will be contracted out, and contracted persons meet requirements of part 145, § 145.217.

B. *Evaluate the Housing and Facilities.* Inspect the following:

(1) Housing and shop areas to ensure the following:

(a) Adequate housing includes sufficient workspace for maintenance functions to be accomplished.

(b) If a repair station holds an airframe class rating or limited airframe (specific model aircraft) rating, that housing includes:

i. Suitable permanent housing for the largest type and model aircraft listed on its OpSpecs.

ii. If climatic conditions allow, the repair station may perform maintenance, preventative maintenance, or alterations outside of its housing if these facilities are acceptable to the FAA and meet the requirements of § 145.103(a).

(c) Proper storage and protection of:

- Materials
- Parts
- Supplies

(d) Proper identification and protection of parts and subassemblies during:

- Disassembly
- Cleaning
- Inspection
- Repair
- Alteration
- Assembly

(e) Segregation of the following:

- Incompatible work areas, e.g., metal shop, battery charging area, or painting area next to an assembly area
- Unpartitioned parts cleaning areas
- Articles and materials stocked for installation from those articles undergoing maintenance or alteration

(f) Proper ventilation, lighting, and temperature and humidity for the type and complexity of work being accomplished

(2) Technical documents to ensure that they are current and accessible when relevant work is being performed:

- Airworthiness directives (AD)
- Instructions for continued airworthiness (ICA)
- Maintenance manuals
- Overhaul Manuals
- Standard practice manuals
- Service bulletins
- Other applicable data acceptable to or approved by the FAA

(3) Equipment, tools, and test equipment, to ensure:

(a) Required types and quantities are available and under the control of the repair station during performance of the work function.

(b) All test and inspection equipment and tools used to make airworthiness determinations are calibrated to a standard acceptable to the FAA.

NOTE: The 14 CFR part 145 rule states that tooling is calibrated to a standard acceptable to the Administrator. Those standards may be derived from the National Institute of Standards and Technology (NIST), or to a standard provided by the equipment manufacturer. International Agreements may also be accepted as a means of compliance. A list of International Agreements referred to as Memorandum of Understanding (MOU) or Mutual Recognition Agreement (MRA) may be accessed from the NIST web site (<http://www.nist.gov/>). Also, the National Voluntary Laboratory Accreditation Program (NVLAP) provides third-party accreditation to testing and calibration laboratories. NVLAP's accreditation programs are established in response to Congressional mandates, administrative actions by the Federal government, or from requests by private-sector organizations. NVLAP is in full conformance with the standards of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), including ISO/IEC 17025 and Guide 58. NVLAP identifies its accredited laboratories in a published directory, NIST Special Publication 810, which is published on the NIST web site. Additionally, for foreign equipment, the standard of the country of manufacture may be used if approved by the Administrator. An Exemption Authorization is required if a repair

station uses equipment of a foreign manufacturer and the method of calibration it will use is not addressed through a MOU or MRA, or the FAA inspector cannot obtain the validity of the Calibration Laboratory. Exemption authorizations are granted through the issuance of an Exemption per 14 CFR part 11 guidance. Currently, Exemptions of this type are issued for a 2-year period and can be renewed if requested by the repair station.

(c) A repair station may substitute manufacturers' tooling with one that is of its equivalent. If the repair station utilizes equivalent tooling they are responsible for the determination of equivalency. The repair station must provide a means available to the FAA that will demonstrate that the tool meets the manufacturer's standards and specifications with all respects regarding tolerances and accuracy.

i. The special equipment or test apparatus must be capable of performing all normal tests and checking all parameters of the equipment (article) under test. The level of accuracy should be equal or better than that recommended by the manufacturer.

ii. The equivalency can only be made based upon an evaluation of a technical data file. The repair station will establish a technical data file for each piece of equivalent tooling. The file will contain, but is not limited to, data, drawings, specifications, instructions, photographs, templates, certificates, and reports.

1. In the case of calibration equipment, the technical data file should also include data sheets attesting to the accuracy when calibration standards are necessary, as well as any special manufacturing processes that are used, including gauges and recording equipment in the controlling process.

2. If calibration equipment is involved, adequacy of that calibration system shall be established with documented procedures to evaluate the adequacy of that calibration equipment and traceable to one of the previously listed standards.

iii. A demonstration of the functionality of the special equipment or test apparatus may be necessary to determine its equivalency.

NOTE: Aircraft Engineering Division, AIR-100, memorandum dated December 21, 1999, states that, "Designated Engineering

Representative (DER) may not approve or determine equivalency of tooling and test equipment.” Furthermore, neither the FAA nor a DER, may approve equipment and/or test apparatus. The FAA and DERs may only make an acceptance of functional *equivalency* for special equipment or test apparatus. It is important to emphasize that the burden of demonstrating *equivalency* is borne by the repair station and not the FAA.

C. Analyze Findings. If deficiencies were found, meet with certificate holder to discuss possible corrective actions.

7. TASK OUTCOMES.

A. File PTRS Data Sheet.

B. Completion of this task will result in one of the following:

(1) If the facilities were found acceptable:

- An entry into the PTRS stating satisfactory/or entries in the comment section
- A letter to the repair station acknowledging the successful completion of the inspection (optional)

(2) If the facilities were found unacceptable:

- A letter describing any deficiencies that must be corrected
- A follow-up evaluation to ensure that the repair station is in compliance with regulations

C. Document Task. File all supporting paperwork in the certificated repair station’s office file.

9. FUTURE ACTIVITIES. Perform follow-up inspection, as appropriate.